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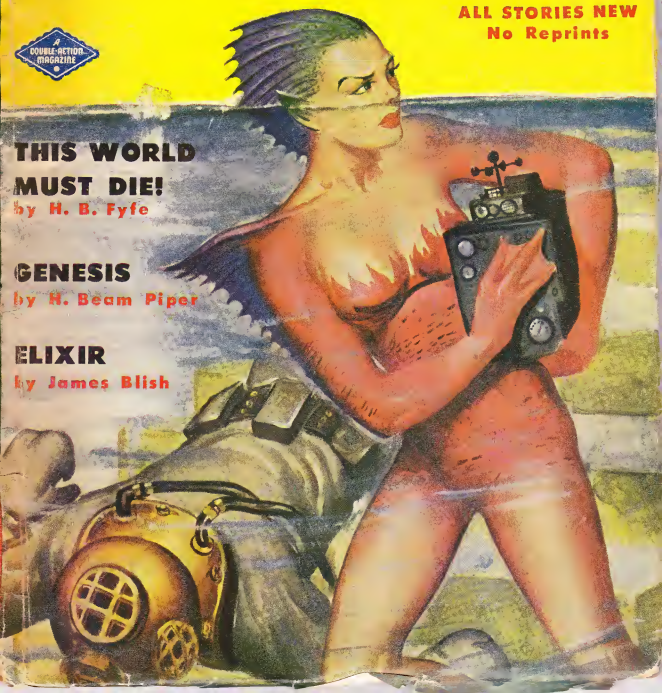
by H. B. Fyfe

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Robert W.
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Editor

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Number 3

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GENESIS

FEATURE
NOVELET
OF LOST
WORLDS

Was this ill-fated expedition the end of a proud, old race—or the beginning of a new one?

ABOARD THE ship, there was neither day nor night; the hours slipped gently by, as vistas of star-gemmed blackness slid across the visiscreens. For the crew, time had some meaning—one watch on duty and two off. But for the thousand-odd colonists, the men and women who were to be the spearhead of migration to a new and friendlier planet, it had none. They slept, and played, worked at such tasks as they could invent, and slept again, while the huge ship followed her plotted trajectory.

Kalvar Dard, the army officer who would lead them in their new home, had as little to do as any of his followers. The ship's officers had all the responsibility for the voyage, and, for the first time in over five years, he had none at all. He was finding the unaccustomed idleness more wearying than the hectic work of loading the ship before the blastoff from Doorsha. He went over his landing and security plans again, and found no probable emergency unprepared for. Dard wandered about the ship, talking to groups of his colonists, and found morale even better than he had hoped. He spent hours staring into the forward visiscreens, watching the disc of Tareesh, the planet of his destination, grow larger and plainer ahead.

Now, with the voyage almost over, he was in the cargo-hold just aft of the Number Seven bulkhead, with six girls to help him, checking construction material which would be needed immediately after landing. The stuff

There are strange gaps in our records of the past. We find traces of man-like things—but, suddenly, man appears, far too much developed to be the "next step" in a well-linked chain of evolutionary evidence. Perhaps something like the events of this story furnishes the answer to the riddle.

had all been checked two or three times before, but there was no harm in going over it again. It furnished an occupation to fill in the time; it gave Kalvar Dard an excuse for surrounding himself with half a dozen charming girls, and the girls seemed to enjoy being with him. There was tall blonde Olva, the electromagnetician; pert little Varnis, the machinist's helper; Kyna, the surgeon's-aide; dark-haired Analea; Dorita, the accountant; plump little Eldra, the armament technician. At the moment, they were all sitting on or around the desk in the corner of the storeroom, going over the inventory when they were not just gabbling.

"Well, how about the rock-drill bits?" Dorita was asking earnestly, trying to stick to business. "Won't we need them almost as soon as we're off?"

"Yes, we'll have to dig temporary magazines for our explosives, small-arms and artillery ammunition, and storage-pits for our fissionables and radioactives," Kalvar Dard replied. "We'll have to have safe places for

By H. Beam Piper



Kalvar Dard and Seldar Glav grabbed the girls, and started tossing them into the life-boat.

that stuff ready before it can be unloaded; and if we run into hard rock near the surface, we'll have to drill holes for blasting-shots."

"The drilling machinery goes into one of those prefabricated sheds," Eldra considered. "Will there be room in it for all the bitts, too?"

Kalvar Dard shrugged. "Maybe. If not, we'll cut poles and build racks for them outside. The bitts are nono-steel; they can be stored in the open."

"If there are poles to cut," Olva added.

"I'm not worrying about that," Kalvar Dard replied. "We have a pretty fair idea of conditions on Tareesh; our astronomers have been making telescopic observations for the past fifteen centuries. There's a pretty big Arctic ice-cap, but it's been receding slowly, with a wide belt of what's believed to be open grassland to the south of it, and a belt of what's assumed to be evergreen forest south of that. We plan to land somewhere in the northern hemisphere, about the grassland-forest line. And since Tareesh is richer in water than Doorsha, you mustn't think of grassland in terms of our wire-grass plains, or forests in terms of our brush thickets. The vegetation should be much more luxuriant."

"If there's such a large polar ice-cap, the summers ought to be fairly cool, and the winters cold," Varnis reasoned. "I'd think that would mean fur-bearing animals. Colonel, you'll have to shoot me something with a nice soft fur; I like furs."

Kalvar Dard chuckled. "Shoot you nothing, you can shoot your own furs. I've seen your carbine and pistol scores," he began.

• **THERE WAS A SUDDEN SUCK** of air, disturbing the papers on the desk. They all turned to see one of the ship's rocket-boat bays open; a young Air Force lieutenant named Seldar Glav, who would be staying on Tareesh with them to pilot their

aircraft, emerged from an open airlock.

"Don't tell me you've been to Tareesh and back in that thing," Olva greeted him.

Seldar Glav grinned at her. "I could have been, at that; we're only twenty or thirty planetary calibers away, now. We ought to be entering Tareeshan atmosphere by the middle of the next watch. I was only checking the boats, to make sure they'll be ready to launch... Colonel Kalvar, would you mind stepping over here? There's something I think you should look at, sir."

Kalvar Dard took one arm from around Analea's waist and lifted the other from Varnis' shoulder, sliding off the desk. He followed Glav into the boat-bay; as they went through the airlock, the cheerfulness left the young lieutenant's face.

"I didn't want to say anything in front of the girls, sir," he began, "but I've been checking boats to make sure we can make a quick getaway. Our meteor-security's gone out. The detectors are deader than the Fourth Dynasty, and the blasters won't synchronize.... Did you hear a big thump, about a half an hour ago, Colonel?"

"Yes, I thought the ship's labor-crew was shifting heavy equipment in the hold aft of us. What was it, a meteor-hit?"

"It was. Just aft of Number Ten bulkhead. A meteor about the size of the nose of that rocket-boat."

Kalvar Dard whistled softly. "Great Gods of Power! The detectors must be dead, to pass up anything like that... Why wasn't a boat-stations call sent out?"

"Captain Vlazil was unwilling to risk starting a panic, sir," the Air Force officer replied. "Really, I'm exceeding my orders in mentioning it to you, but I thought you should know..."

Kalvar Dard swore. "It's a blasted pity Captain Vlazil didn't try thinking! Gold-braided quarter-wit! Maybe his crew might panic, but my

people wouldn't... I'm going to call the control-room and have it out with him. By the Ten Gods...!"

•HE RAN THROUGH THE airlock and back into the hold, starting toward the intercom-phone beside the desk. Before he could reach it, there was another heavy jar, rocking the entire ship. He, and Seldar Glav, who had followed him out of the boat-bay, and the six girls, who had risen on hearing their commander's angry voice, were all tumbled into a heap. Dard surged to his feet, dragging Kyna up along with him; together, they helped the others to rise. The ship was suddenly filled with jangling bells, and the red danger-lights on the ceiling were flashing on and off.

"Attention! Attention!" the voice of some officer in the control-room blared out of the intercom-speaker. "The ship has just been hit by a large meteor! All compartments between bulkheads Twelve and Thirteen are sealed off. All persons between bulkheads Twelve and Thirteen, put on oxygen helmets and plug in at the nearest phone connection. Your air is leaking, and you can't get out, but if you put on oxygen equipment immediately, you'll be all right. We'll get you out as soon as we can, and in any case, we are only a few hours out of Tareeshan atmosphere. All persons in Compartment Twelve, put on..."

Kalvar Dard was swearing evilly. "That does it! That does it for good!... Anybody else in this compartment, below the living quarter level?"

"No, we're the only ones," Analea told him.

"The people above have their own boats; they can look after themselves. You girls, get in that boat, in there. Glav, you and I'll try to warn the people above..."

There was another jar, heavier than the one which had preceded it, throwing them all down again. As they

rose, a new voice was shouting over the public-address system:

"Abandon ship! Abandon ship! The converters are backfiring, and rocket-fuel is leaking back toward the engine-rooms! An explosion is imminent! Abandon ship, all hands!"

Kalvar Dard and Seldar Glav grabbed the girls and literally threw them through the hatch, into the rocket-boat. Dard pushed Glav in ahead of him, then jumped in. Before he had picked himself up, two or three of the girls were at the hatch, dogging the cover down.

"All right, Glav, blast off!" Dard ordered. "We've got to be at least a hundred miles from this ship when she blows, or we'll blow with her!"

"Don't I know!" Seldar Glav retorted over his shoulder, racing for the controls. "Grab hold of something, everybody; I'm going to fire all jets at once!"

An instant later, while Kalvar Dard and the girls clung to stanchions and pieces of fixed furniture, the boat shot forward out of its housing. When Dard's head had cleared, it was in free flight.

"How was that?" Glav yelled. "Everybody all right?" He hesitated for a moment. "I think I blacked out for about ten seconds."

Kalvar Dard looked the girls over. Eldra was using a corner of her smock to stanch a nosebleed, and Olva had a bruise over one eye. Otherwise, everybody was in good shape.

"Wonder we didn't all black out, permanently," he said. "Well, put on the visiscreens, and let's see what's going on outside. Olva, get on the radio and try to see if anybody else got away."

"Set course for Tareesh?" Glav asked. "We haven't fuel enough to make it back to Doorsha."

"I was afraid of that," Dard nodded. "Tareesh it is; northern hemisphere, daylight side. Try to get about the edge of the temperate zone, as near water as you can..."



THEY WERE flung off their feet again, this time backward along the boat. As they picked themselves up, Seldar Glav was shaking his head, sadly. "That was the ship going up," he said; "the blast must have caught us dead astern."

"All right." Kalvar Dard rubbed a bruised forehead. "Set course for Tareesh, then cut out the jets till we're ready to land. And get the screens on, somebody; I want to see what's happened."

The screens glowed; then full vision came on. The planet on which they would land loomed huge before them, its north pole toward them, and its single satellite on the port side. There was no sign of any rocket-boat in either side screen, and the rear-view screen was a blur of yellow flame from the jets.

"Cut the jets, Glav," Dard repeated. "Didn't you hear me?"

"But I did, sir!" Seldar Glav indicated the firing-panel. Then he glanced at the rear-view screen. "The gods help us! It's yellow flame; the jets are burning out!"

Kalvar Dard had not boasted idly when he had said that his people would not panic. All the girls went white, and one or two gave low cries of consternation, but that was all.

"What happens next?" Analea wanted to know. "Do we blow, too?"

"Yes, as soon as the fuel-line burns up to the tanks."

"Can you land on Tareesh before then?" Dard asked.

"I can try. How about the satellite? It's closer."

"It's also airless. Look at it and see for yourself," Kalvar Dard advised. "Not enough mass to hold an atmosphere."

Glav looked at the army officer with new respect. He had always been

inclined to think of the Frontier Guards as a gang of scientifically illiterate dirk-and-pistol bravos. He fiddled for a while with instruments on the panel; an automatic computer figured the distance to the planet, the boat's velocity, and the time needed for a landing.

"We have a chance, sir," he said. "I think I can set down in about thirty minutes; that should give us about ten minutes to get clear of the boat, before she blows up."

"All right; get busy, girls," Kalvar Dard said. "Grab everything we'll need. Arms and ammunition first; all of them you can find. After that, warm clothing, bedding, tools and food."

With that, he jerked open one of the lockers and began pulling out weapons. He buckled on a pistol and dagger, and handed other weapon-belts to the girls behind him. He found two of the heavy big-game rifles, and several bandoliers of ammunition for them. He tossed out carbines, and boxes of carbine and pistol cartridges. He found two bomb-bags, each containing six light anti-personnel grenades and a big demolition-bomb. Glancing, now and then, at the forward screen, he caught glimpses of blue sky and green-tinted plains below.

"All right!" the pilot yelled. "We're coming in for a landing! A couple of you stand by to get the hatch open."

There was a jolt, and all sense of movement stopped. A cloud of white smoke drifted past the screens. The girls got the hatch open; snatching up weapons and bedding-wrapped bundles they all scrambled up out of the boat.

There was fire outside. The boat had come down upon a grassy plain; now the grass was burning from the heat of the jets. One by one, they ran forward along the top of the rocket-boat, jumping down to the ground clear of the blaze. Then, with every atom of strength they possessed, they ran away from the doomed boat.

•THE GROUND WAS ROUGH, and the grass high, impeding them. One of the girls tripped and fell; without pausing, two others pulled her to her feet, while another snatched up and slung the carbine she had dropped. Then, ahead, Kalvar Dard saw a deep gully, through which a little stream trickled.

They huddled together at the bottom of it, waiting, for what seemed like a long while. Then a gentle tremor ran through the ground, and swelled to a sickening, heaving shock. A roar of almost palpable sound swept over them, and a flash of blue-white light dimmed the sun above. The sound, the shock, and the searing light did not pass away at once; they continued for seconds that seemed like an eternity. Earth and stones pelted down around them; choking dust rose. Then the thunder and the earth-shock were over; above, incandescent vapors swirled, and darkened into an overhanging pall of smoke and dust.

For a while, they crouched motionless, too stunned to speak. Then shaken nerves steadied and jarred brains cleared. They all rose weakly. Trickles of earth were still coming down from the sides of the gully, and the little stream, which had been clear and sparkling, was roiled with mud. Mechanically, Kalvar Dard brushed the dust from his clothes and looked to his weapons.

"That was just the fuel-tank of a little Class-3 rocket-boat," he said. "I wonder what the explosion of the ship was like." He thought for a moment before continuing. "Glav, I think I know why our jets burned out. We were stern-on to the ship when she blew; the blast drove our flame right back through the jets."

"Do you think the explosion was observed from Doorsha?" Dorita inquired, more concerned about the practical aspects of the situation. "The ship, I mean. After all, we have no means of communication, of our own."

"Oh, I shouldn't doubt it; there were observatories all around the

planet watching our ship," Kalvar Dard said. "They probably know all about it, by now. But if any of you are thinking about the chances of rescue, forget it. We're stuck here."

"That's right. There isn't another human being within fifty million miles," Seldar Glav said. "And that was the first and only space-ship ever built. It took fifty years to build her, and even allowing twenty for research that wouldn't have to be duplicated, you can figure when we can expect another one."

"The answer to that one is, never. The ship blew up in space; fifty years' effort and fifteen hundred people gone, like that." Kalvar Dard snapped his fingers. "So now, they'll try to keep Doorsha habitable for a few more thousand years by irrigation, and forget about immigrating to Tareesh."

"Well, maybe, in a hundred thousand years, our descendants will build a ship and go to Doorsha, then," Olva considered.

"Our descendants?" Eldra looked at her in surprise. "You mean, then...?"

•KYNA CHUCKLED. "ELDRA, you are an awful innocent, about anything that doesn't have a breech-action or a recoil-mechanism," she said. "Why do you think the women on this expedition outnumbered the men seven to five, and why do you think there were so many obstetricians and pediatricians in the med. staff? We were sent out to put a human population on Tareesh, weren't we? Well, here we are."

"But... Aren't we ever going to...?" Varnis began. "Won't we ever see anybody else, or do anything but just live here, like animals, without machines or ground-cars or aircraft or houses or anything?" Then she began to sob bitterly.

Analea, who had been cleaning a carbine that had gotten covered with loose earth during the explosion, laid it down and went to Varnis, putting her arm around the other girl and

comforting her. Kalvar Dard picked up the carbine she had laid down.

"Now, let's see," he began. "We have two heavy rifles, six carbines, and eight pistols, and these two bags of bombs. How much ammunition, counting what's in our belts, do we have?"

They took stock of their slender resources, even Varnis joining in the task, as he had hoped she would. There were over two thousand rounds for the pistols, better than fifteen hundred for the carbines, and four hundred for the two big-game guns. They had some spare clothing, mostly space-suit undergarments, enough bed-robos, one hand-axe, two flashlights, a first-aid kit, and three atomic lighters. Each one had a combat-dagger. There was enough tinned food for about a week.

"We'll have to begin looking for game and edible plants, right away," Glav considered. "I suppose there is game, of some sort; but our ammunition won't last forever."

"We'll have to make it last as long as we can; and we'll have to begin improvising weapons," Dard told him. "Throwing-spears, and throwing-axes. If we can find metal, or any recognizable ore that we can smelt, we'll use that; if not, we'll use chipped stone. Also, we can learn to make snares and traps, after we learn the habits of the animals on this planet. By the time the ammunition's gone, we ought to have learned to do without firearms."

"Think we ought to camp here?"

Kalvar Dard shook his head. "No wood here for fuel, and the blast will have scared away all the game. We'd better go upstream; if we go down, we'll find the water roiled with mud and unfit to drink. And if the game on this planet behave like the game-herds on the wastelands of Doorsha, they'll run for high ground when frightened."

Varnis rose from where she had been sitting. Having mastered her emotions, she was making a deliberate effort to show it.

"Let's make up packs out of this stuff," she suggested. "We can use the bedding and spare clothing to bundle up the food and ammunition."

They made up packs and slung them, then climbed out of the gully. Off to the left, the grass was burning in a wide circle around the crater left by the explosion of the rocket-boat. Kalvar Dard, carrying one of the heavy rifles, took the lead. Beside and a little behind him, Analea walked, her carbine ready. Glav, with the other heavy rifle, brought up in the rear, with Olva covering for him, and between, the other girls walked, two and two.

Ahead, on the far horizon, was a distance-blue line of mountains. The little company turned their faces toward them and moved slowly away, across the empty sea of grass.



THEY HAD been walking, now, for five years. Kalvar Dard still led, the heavy rifle cradled in the crook of his left arm and a sack of bombs slung from his shoulder, his eyes forever shifting to right and left searching for hidden danger. The clothes in which he had jumped from the rocket-boat were patched and ragged; his shoes had been replaced by high laced buskins of smoke-tanned hide. He was bearded, now, and his hair had been roughly trimmed with the edge of his dagger.

Analea still walked beside him, but her carbine was slung, and she carried three spears with chipped flint heads; one heavy weapon, to be thrown by hand or used for stabbing, and two light javelins to be thrown with the aid of the hooked throwing-stick Glav had invented. Beside her trudged a four-year old boy, hers and Dard's, and on her back, in a fur-lined net bag, she carried their six-month-old baby.

In the rear, Glav still kept his place with the other big-game gun, and Olva walked beside him with carbine and spears; in front of them, their three-year-old daughter toddled. Between vanguard and rearguard, the rest of the party walked: Varnis, carrying her baby on her back, and Dorita, carrying a baby and leading two other children. The baby on her back had cost the life of Kyna in childbirth; one of the others had been left motherless when Eldra had been killed by the Hairy People.

That had been two years ago, in the winter when they had used one of their two demolition-bombs to blast open a cavern in the mountains. It had been a hard winter; two children had died, then—Kyna's firstborn, and the little son of Kalvar Dard and Dorita. It had been their first encounter with the Hairy People, too.

Eldra had gone outside the cave with one of the skin water-bags, to fill it at the spring. It had been after sunset, but she had carried her pistol, and no one had thought of danger until they heard the two quick shots, and the scream. They had all rushed out, to find four shaggy, manlike things tearing at Eldra with hands and teeth, another lying dead, and a sixth huddled at one side, clutching its abdomen and whimpering. There had been a quick flurry of shots that had felled all four of the assailants, and Seldar Klav had finished the wounded creature with his dagger, but Eldra was dead. They had built a cairn of stones over her body, as they had done over the bodies of the two children killed by the cold. But, after an examination to see what sort of things they were, they had tumbled the bodies of the Hairy People over the cliff. These had been too bestial to bury as befitted human dead, but too manlike to skin and eat as game.

Since then, they had often found

traces of the Hairy People, and when they met with them, they killed them without mercy. These were great shambling parodies of humanity, long-armed, short-legged, twice as heavy as men, with close-set reddish eyes and heavy bone-crushing jaws. They may have been incredibly debased humans, or perhaps beasts on the very threshold of manhood. From what he had seen of conditions on this planet, Kalvar Dard suspected the latter to be the case. In a million or so years, they might evolve into something like humanity. Already, the Hairy ones had learned the use of fire, and of chipped crude stone implements—mostly heavy triangular choppers to be used in the hand, without helves.

Twice, after that night, the Hairy People had attacked them—once while they were on the march, and once in camp. Both assaults had been beaten off without loss to themselves, but at cost of precious ammunition. Once they had caught a band of ten of them swimming a river on logs; they had picked them all off from the bank with their carbines. Once, when Kalvar Dard and Analea had been scouting alone, they had come upon a dozen of them huddled around a fire and had wiped them out with a single grenade. Once, a large band of Hairy People hunted them for two days, but only twice had they come close, and both times, a single shot had sent them all scampering. That had been after the bombing of the group around the fire. Dard was convinced that the beings possessed the rudiments of a language, enough to communicate a few simple ideas, such as the fact that this little tribe of aliens were dangerous in the extreme.

THERE WERE HAIRY People about now; for the past five days, moving northward through the forest to the open grasslands, the people of Kalvar Dard had found traces of them. Now, as they came out among the seedling growth at the edge

of the open plains, everybody was on the alert.

They emerged from the big trees and stopped among the young growth, looking out into the open country. About a mile away, a herd of game was grazing slowly westward. In the distance, they looked like the little horse-like things, no higher than a man's waist and heavily maned and bearded, that had been one of their most important sources of meat. For the ten thousandth time, Dard wished, as he strained his eyes, that somebody had thought to secure a pair of binoculars when they had abandoned the rocket-boat. He studied the grazing herd for a long time.

The seedling pines extended almost to the game-herd and would offer concealment for the approach, but the animals were grazing into the wind, and their scent was much keener than their vision. This would prelude one of their favorite hunting techniques, that of lurking in the high grass ahead of the quarry. It had rained heavily in the past few days, and the undermat of dead grass was soaked, making a fire-hunt impossible. Kalvar Dard knew that he could stalk to within easy carbine-shot, but he was unwilling to use cartridges on game; and in view of the proximity of Hairly People, he did not want to divide his band for a drive hunt.

"What's the scheme?" Analea asked him, realizing the problem as well as he did. "Do we try to take them from behind?"

"We'll take them from an angle," he decided. "We'll start from here and work in, closing on them at the rear of the herd. Unless the wind shifts on us, we ought to get within spear-cast. You and I will use the spears; Varnis can come along and cover for us with a carbine. Glav, you and Olva and Dorita stay here with the children and the packs. Keep a sharp lookout; Hairly People around, somewhere." He unslung his rifle and exchanged it for Olva's spears. "We

can only eat about two of them before the meat begins to spoil, but kill all you can," he told Analea; "we need the skins."

Then he and the two girls began their slow, cautious, stalk. As long as the grassland was dotted with young trees, they walked upright, making good time, but the last five hundred yards they had to crawl, stopping often to check the wind, while the horse-herd drifted slowly by. Then they were directly behind the herd, with the wind in their faces, and they advanced more rapidly.

"Close enough?" Dard whispered to Analea.

"Yes; I'm taking the one that's lagging a little behind."

"I'm taking the one on the left of it." Kalvar Dard fitted a javelin to the hook of his throwing-stick. "Ready? Now!"

He leaped to his feet, drawing back his right arm and hurling, the throwing-stick giving added velocity to the spear. Beside him, he was conscious of Analea rising and propelling her spear. His missile caught the little bearded pony in the chest; it stumbled and fell forward to its front knees. He snatched another light spear, set it on the hook of the stick and darted it at another horse, which reared, biting at the spear with its teeth. Grabbing the heavy stabbing-spear, he ran forward, finishing it off with a heart-thrust. As he did, Varnis slung her carbine, snatched a stone-headed throwing axe from her belt, and knocked down another horse, then ran forward with her dagger to finish it.

By this time, the herd, alarmed, had stampeded and was galloping away, leaving the dead and dying behind. He and Analea had each killed two; with the one Varnis had knocked down, that made five. Using his dagger, he finished off one that was still kicking on the ground, and then began pulling out the throwing-spears. The girls,

shouting in unison, were announcing the successful completion of the hunt; Glav, Olva, and Dorita were coming forward with the children.

•IT WAS SUNSET BY THE time they had finished the work of skinning and cutting up the horses and had carried the hide-wrapped bundles of meat to the little brook where they had intended camping. There was firewood to be gathered, and the meal to be cooked, and they were all tired.

"We can't do this very often, any more," Kalvar Dard told them, "but we might as well, tonight. Don't bother rubbing sticks for fire; I'll use the lighter."

He got it from a pouch on his belt—a small, gold-plated, atomic lighter, bearing the crest of his old regiment of the Frontier Guards. It was the last one they had, in working order. Piling a handful of dry splinters under the firewood, he held the lighter to it, pressed the activator, and watched the fire eat into the wood.

The greatest achievement of man's civilization, the mastery of the basic, cosmic, power of the atom—being used to kindle a fire of natural fuel, to cook unseasoned meat killed with stone-tipped spears. Dard looked sadly at the twinkling little gadget, then slipped it back into its pouch. Soon it would be worn out, like the other two, and then they would gain fire only by rubbing dry sticks, or hacking sparks from bits of flint or pyrites. Soon, too, the last cartridge would be fired, and then they would perforce depend for protection, as they were already doing for food, upon their spears.

And they were so helpless. Six adults, burdened with seven little children, all of them requiring momentarily care and watchfulness. If the cartridges could be made to last until they were old enough to fend for themselves... If they could avoid collisions with the Hairy People... Some day, they would be numerous enough for effective mutual protection and support;

some day, the ratio of helpless children to able adults would redress itself. Until then, all that they could do would be to survive; day after day, they must follow the game-herds.



FOR TWENTY YEARS, now, they had been following the game. Winters had come, with driving snow, forcing horses and deer into the woods, and the little band of humans to the protection of mountain caves. Springtime followed, with fresh grass on the plains and plenty of meat for the people of Kalvar Dard. Autumns followed summers, with fire-hunts, and the smoking and curing of meat and hides. Winters followed autumns, and springtimes came again, and thus until the twentieth year after the landing of the rocket-boat.

Kalvar Dard still walked in the lead, his hair and beard flecked with gray, but he no longer carried the heavy rifle; the last cartridge for that had been fired long ago. He carried the hand-axe, fitted with a long helve, and a spear with a steel head that had been worked painfully from the receiver of a useless carbine. He still had his pistol, with eight cartridges in the magazine, and his dagger, and the bomb-bag, containing the big demolition-bomb and one grenade. The last shred of clothing from the ship was gone, now; he was clad in a sleeveless tunic of skin and horsehide buskins.

Analea no longer walked beside him; eight years before, she had broken her back in a fall. It had been impossible to move her, and she stabbed herself with her dagger to save a cartridge. Seldar Glav had broken through the ice while crossing a river, and had lost his rifle; the next day he died of the chill he had taken. Olva had been killed by the Hairy People,

the night they had attacked the camp, when Varnis' child had been killed.

They had beaten off that attack, shot or speared ten of the huge sub-men, and the next morning they buried their dead after their custom, under cairns of stone. Varnis had watched the burial of her child with blank, uncomprehending eyes, then she had turned to Kalvar Dard and said something that had horrified him more than any wild outburst of grief could have.

"Come on, Dard; what are we doing this for? You promised you'd take us to Tareesh, where we'd have good houses, and machines, and all sorts of lovely things to eat and wear. I don't like this place, Dard; I want to go to Tareesh."

From that day on, she had wandered in merciful darkness. She had not been idiotic, or raving mad; she had just escaped from a reality that she could no longer bear.

Varnis, lost in her dream-world, and Dorita, hard-faced and haggard, were the only ones left, beside Kalvar Dard, of the original eight. But the band had grown, meanwhile, to more than fifteen. In the rear, in Seldar Glav's old place, the son of Kalvar Dard and Analea walked. Like his father, he wore a pistol, for which he had six rounds, and a dagger, and in his hand he carried a stone-headed killing-maul with a three-foot handle which he had made for himself. The woman who walked beside him and carried his spears was the daughter of Glav and Olva; in a net-bag on her back she carried their infant child. The first Tareeshan born of Tareeshan parents; Kalvar Dard often looked at his little grandchild during nights in camp and days on the trail, seeing, in that tiny fur-swaddled morsel of humanity, the meaning and purpose of all that he did. Of the older girls, one or two were already pregnant, now; this tiny threatened beachhead of humanity was expanding, gaining strength. Long after man had died out on Doorsha

and the dying planet itself had become an arid waste, the progeny of this little band would continue to grow and to dominate the younger planet, nearer the sun. Some day, an even mightier civilization that the one he had left would rise here...

• **A**LL DAY, THE TRAIL HAD wound upward into the mountains. Great cliffs loomed above them, and little streams spumed and dashed in rocky gorges below. All day, the Hairy People had followed, fearful to approach too close, unwilling to allow their enemies to escape. It had started when they had rushed the camp, at daybreak; they had been beaten off, at cost of almost all the ammunition, and the death of one child. No sooner had the tribe of Kalvar Dard taken the trail, however, than they had been pressing after them. Dard had determined to cross the mountains, and had led his people up a game-trail, leading toward the notch of a pass high against the skyline.

The shaggy ape-things seemed to have divined his purpose. Once or twice, he had seen hairy brown shapes dodging among the rocks and stunted trees to the left. They were trying to reach the pass ahead of him. Well, if they did... He made a quick mental survey of his resources. His pistol, and his son's, and Dorita's, with eight, and six, and seven rounds. One grenade, and the big demolition bomb, too powerful to be thrown by hand, but which could be set for delayed explosion and dropped over a cliff or left behind to explode among pursuers. Five steel daggers, and plenty of spears and slings and axes. Himself, his son and his son's woman, Dorita, and four or five of the older boys and girls, who would make effective front-line fighters. And Varnis, who might come out of her private dream-world long enough to give account for herself, and even the tiniest of the walking children could throw stones or light spears. Yes, they could force the pass,

If the Hairy People reached it ahead of them, and then seal it shut with the heavy bomb. What lay on the other side, he did not know; he wondered how much game there would be, and if there were Hairy People on that side, too.

Two shots slammed quickly behind him. He dropped his axe and took a two-hand grip on his stabbing-spear as he turned. His son was hurrying forward, his pistol drawn, glancing behind as he came.

"Hairy People. Four," he reported. "I shot two; she threw a spear and killed another. The other ran."

The daughter of Seldar Glav and Olva nodded in agreement.

"I had no time to throw again," she said, "and Bo-Bo would not shoot the one that ran."

Kalvar Dard's son, who had no other name than the one his mother had called him as a child, defended himself. "He was running away. It is the rule: *use bullets only to save life, where a spear will not serve.*"

Kalvar Dard nodded. "You did right, son," he said, taking out his own pistol and removing the magazine, from which he extracted two cartridges. "Load these into your pistol; four rounds aren't enough. Now we each have six. Go back to the rear, keep the little ones moving, and don't let Varnis get behind."

"That is right. *We must all look out for Varnis, and take care of her,*" the boy recited obediently. "That is the rule."

He dropped to the rear. Kalvar Dard holstered his pistol and picked up his axe, and the column moved forward again. They were following a ledge, now; on the left, there was a sheer drop of several hundred feet, and on the right a cliff rose above them, growing higher and steeper as the trail slanted upward. Dard was worried about the ledge; if it came to an end, they would all be trapped. No one would escape. He suddenly felt old and unutterably weary. It was a

frightful weight that he bore—responsibility for an entire race.

● **S**UDDENLY, BEHIND HIM, Dorita fired her pistol upward. Dark sprang forward—there was no room for him to jump aside—and drew his pistol. They boy, Bo-Bo, was trying to find a target from his position in the rear. Then Dard saw the two Hairy People; the boy fired, and the stone fell, all at once.

It was a heavy stone, half as big as a man's torso, and it almost missed Kalvar Dard. If it had hit him directly, it would have killed him instantly, mashing him to a bloody pulp; as it was, he was knocked flat, the stone pinning his legs.

At Bo-Bo's shot, a hairy body plummeted down, to hit the ledge. Bo-Bo's woman instantly ran it through with one of her spears. The other ape-thing, the one Dorita had shot, was still clinging to a rock above. Two of the children scampered up to it and speared it repeatedly, screaming like little furies. Dorita and one of the older girls got the rock off Kalvar Dard's legs and tried to help him to his feet, but he collapsed, unable to stand. Both his legs were broken.

This was it, he thought, sinking back. "Dorita, I want you to run ahead and see what the trail's like," he said. "See if the ledge is passable. And find a place, not too far ahead, where we can block the trail by exploding that demolition-bomb. It has to be close enough for a couple of you to carry or drag me and get me there in one piece."

"What are you going to do?"

"What do you think?" he retorted. "I have both legs broken. You can't carry me with you; if you try it, they'll catch us and kill us all. I'll have to stay behind; I'll block the trail behind you, and get as many of them as I can, while I'm at it. Now, run along and do as I said."

She nodded. "I'll be back as soon as I can," she agreed.

The others were crowding around Dard. Bo-Bo bent over him, perplexed and worried. "What are you going to do, father?" he asked. "You are hurt. Are you going to go away and leave us, as mother did when she was hurt?"

"Yes, son; I'll have to. You carry me on ahead a little, when Dorita gets back, and leave me where she shows you to. I'm going to stay behind and block the trail, and kill a few Hairy People. I'll use the big bomb."

"The *big* bomb? The one nobody dar's throw?" The boy looked at his father in wonder.

"That's right. Now, when you leave me, take the others and get away as fast as you can. Don't stop till you're up to the pass. Take my pistol and dagger, and the axe and the big spear, and take the little bomb, too. Take everything I have, only leave the big bomb with me. I'll need that."

Dorita rejoined them. "There's a waterfall ahead. We can get around it, and up to the pass. The way's clear and easy; if you put off the bomb just this side of it, you'll start a rock-slide that'll block everything."

"All right. Pick me up, a couple of you. Don't take hold of me below the knees. And hurry."

• **A HAIRY SHAPE APPEARED** on the ledge below them; one of the older boys used his throwing-stick to drive a javelin into it. Two of the girls picked up Dard; Bo-Bo and his woman gathered up the big spear and the axe and the bomb-bag.

They hurried forward, picking their way along the top of a talus of rubble at the foot of the cliff, and came to where the stream gushed out of a narrow gorge. The air was wet with spray there, and loud with the roar of the waterfall. Kalvar Dard looked around; Dorita had chosen the spot well. Not even a sure-footed mountain-goat could make the ascent, once that gorge was blocked.

"All right; put me down here," he

directed. "Bo-Bo, take my belt, and give me the big bomb. You have one light grenade; know how to use it?"

"Of course, you have often showed me. I turn the top, and then press in the little thing on the side, and hold it in till I throw. I throw it at least a spear-cast, and drop to the ground or behind something."

"That's right. And use it only in greatest danger, to save everybody. Spare your cartridges; use them only to save life. And save everything of metal, no matter how small."

"Yes. Those are the rules. I will follow them, and so will the others. And we will always take care of Varnis."

"Well, goodbye, son." He gripped the boy's hand. "Now get everybody out of here; don't stop till you're at the pass."

"You're not staying behind!" Varnis cried. "Dard, you promised us! I remember, when we were all in the ship together—you and I and Analea and Olva and Dorita and Eldra and, oh, what was that other girl's name, Kynal! And we were all having such a nice time, and you were telling us how we'd all come to Tareesh, and we were having such fun talking about it..."

"That's right, Varnis," he agreed. "And so I will. I have something to do, here, but I'll meet you on top of the mountain, after I'm through, and in the morning we'll all go to Tareesh."

She smiled—the gentle, childlike smile of the harmlessly mad—and turned away. The son of Kalvar Dard made sure that she and all the children were on the way, and then he, too, turned and followed them, leaving Dard alone.

Alone, with a bomb and a task. He'd borne that task for twenty years, now; in a few minutes, it would be ended, with an instant's searing heat. He tried not to be too glad; there were

so many things he might have done, if he had tried harder. Metals, for instance. Somewhere there surely must be ores which they could have smelted, but he had never found them. And he might have tried catching some of the little horses they hunted for food, to break and train to bear burdens. And the alphabet—why hadn't he taught it to Bo-Bo and the daughter of Seldar Glav, and laid on them an obligation to teach the others? And the grass-seeds they used for making flour sometimes; they should have planted fields of the better kinds, and patches of edible roots, and returned at the proper time to harvest them. There were so many things, things that none of those young savages or their children would think of in ten thousand years...

Something was moving among the rocks, a hundred yards away. He straightened, as much as his broken legs would permit, and watched. Yes, there was one of them, and there was another, and another. One rose from behind a rock and came forward at a shambling run, making bestial sounds. Then two more lumbered into sight, and in a moment the ravine was alive with them. They were almost upon him when Kalvar Dard pressed in the thumbpiece of the bomb; they were clutching at him when he released it. He felt a slight jar...

● **WHEN THEY REACHED THE** pass, they all stopped as the son of Kalvar Dard turned and looked back. Dorita stood beside him, looking toward the waterfall too; she also knew what was about to happen. The others merely gaped in blank incomprehension, or grasped their weapons, thinking that the enemy was pressing close behind and that they were making a stand here. A few of the smaller boys and girls began picking up stones.

Then a tiny pin-point of brilliance

winked, just below where the snow-fed stream vanished into the gorge. That was all, for an instant, and then a great fire-shot cloud swirled upward, hundreds of feet into the air; there was a crash, louder than any sound any of them except Dorita and Varnis had ever heard before.

"He did it!" Dorita said softly.

"Yes, he did it. My father was a brave man," Bo-Bo replied. "We are safe, now."

Varnis, shocked by the explosion, turned and stared at him, and then she laughed happily. "Why, there you are, Dard!" she exclaimed. "I was wondering where you'd gone. What did you do, after we left?"

"What do you mean?" The boy was puzzled, not knowing how much he looked like his father, when his father had been an officer of the Frontier Guards, twenty years before.

His puzzlement worried Varnis vaguely. "You... You are Dard, aren't you?" she asked. "But that's silly; of course you're Dard! Who else could you be?"

"Yes, I am Dard," the boy said, remembering that it was the rule for everybody to be kind to Varnis and to pretend to agree with her. Then another thought struck him. His shoulders straightened. "Yes. I am Dard, son of Dard," he told them all. "I lead, now. Does anybody say no?"

He shifted his axe and spear to his left hand and laid his right hand on the butt of his pistol, looking sternly at Dorita. If any of them tried to dispute his claim, it would be she. But instead, she gave him the nearest thing to a real smile that had crossed her face in years.

"You are Dard," she told him; "you lead us, now."

"But of course Dard leads! Hasn't he always led us?" Varnis wanted to know. "Then what's all the argument about? And tomorrow he's going to

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The girl clawed at Brecken's face as he raised the metal bar...

THIS WORLD MUST DIE!

Feature Novelet of Dread Necessity

"You have been chosen for this mission of murder because you are the only people in our culture who are capable of this type of violence. You have broken our laws, and this is your punishment!"

By H. B. Fyfe

LOU PHILLIPS sat on the cold metal deck of the control room, seething with a growing dislike for the old man.

"What you are here for," the other had told him when the guards had brought Phillips in, "is a simple crime of violence. You'll do, I'm sure."

The old man paced the deck impatiently, while a pair of armed guards maintained a watchful silence by the door. Two more men in plain gray shirts and trousers sat beside Phillips, leaning back sullenly against the bulkhead. He guessed that they were waiting for a fourth, remembering that three other figures had been hustled aboard with him at the Lunar spaceport.

The door slid open, allowing another youth in gray uniform to stumble inside. One of the guards in the corridor beyond shoved the newcomer forward, and Phillips' eyebrows

twitched as he had a closer look. This last prisoner was a girl.

He thought she might have been pretty, with a touch of lipstick and a kinder arrangement of her short, ash-blond hair; but he lowered his eyes as her hard, wary stare flickered past him. She walked over to the bulkhead and took a seat at the other end of the little group.

The old man turned, scanning their faces critically. "I am in charge of a peculiar project," he announced abruptly. "The director of the Lunar Detention Colony claims that you four are the best he has—for our purposes!"

Long habit kept the seated ones guardedly silent. Seeing, apparently, that they would not relax, he continued.

"You were chosen because each of you has received a sentence of detention for life because of tendencies toward violence in one form or another.

Social living requires the elimination, or at very best, the modification of many elements necessary to survival in "nature". And when an emergency arises, very often it is the person who would be considered a "criminal", in other situations, who alone is able to cope with the necessities. If we manage to eliminate "violence" from human affairs, what will we find when a need for "violence" arises—a need outside of man's artificial control of his environment?

In our twenty-second century civilization such homicidal inclinations are quite rare, due to the law-abiding habits of generations under the Interplanetary Council."

He had been pacing the cramped space left free by the equipment, the guards, and the four seated prisoners. Now he paused, as if mildly astonished at what he was about to say.

"In fact, now that we are faced by a situation demanding illegal violence, it appears that no *normal* citizen is capable of committing such an act. Using you may eliminate costly screening processes...and save time. Incidentally, I am Anthony Varret, Undersecretary for Security in the Council."

None of the four showed any overt sign of being impressed. Phillips knew that the others, like himself, were scrutinizing the old man with cold, secretive stares. They had learned through harsh experience to keep their own counsels. Varret shrugged. "Well, then," he said dryly, "I might as well call the roll. I have been supplied with accurate records."

•HE DREW A NOTEBOOK from his pocket, consulted it briefly, then nodded at the man next to the girl. "Robert Brecken," he recited, "age thirty-one, six feet, one hundred eighty-five pounds, hair reddish brown, eyes green, complexion ruddy. Convicted of unjustified homicide by personal assault while resisting arrest for embezzlement. Detention record unsatisfactory. Implicated in two minor mutinies."

He glanced next at the youth beside Phillips. "Raymond Truesdale, age twenty-two, five-feet-five, one-thirty. Hair black, eyes dark brown, complexion pale. Convicted of two suicide attempts following failures in various artistic fields. Detention record fair, psychological report poor."

His frosty eyes met Phillips'. "Louis Phillips, age twenty-six, five-ten, one-eighty. Hair brown, eyes brown, complexion darkly tanned—

that was before Luna, wasn't it, Phillips? Convicted of unjustified homicide, having assaulted a jet mechanic so as to cause death. Detention record satisfactory."

The blonde girl was last in Varret's review. "Donna Bailey, age twenty-three, five-five, one-fifteen. Hair blonde, eyes blue, complexion fair. Convicted of manslaughter by negligence, while piloting an atmosphere sport rocket in an intoxicated condition. Detention record satisfactory."

Varret fell silent, regarding them with cynical disgust. His lips twisted slightly with distaste. "There we have it," he said. "A violent-tempered thief from the business world; an over-expensive purchase by a rich playboy who became his widow by her own negligence; a mentally-unstable fool who thought he was artistically gifted, and a rocket-engineer who was too brutally careless with his own strength when irritated by a space-fatigued helper. I wonder if you'll do...?"

Phillips felt impelled at last to speak. "Just what plans do you have for us?" he demanded harshly.

"Nothing complicated," replied Varret, matching the tone. "We need you to perform a mass murder!"

Phillips blinked, despite his prison-learned reserve. He heard the girl suck in her breath sharply, and felt the youth beside him begin to tremble.

"I have shocked you, I see," sneered Varret. "Well, I assure you, it shocks me also, probably a good deal more since I have lived a normal life. However—this is the background:

"About three months ago, we had reports of the outbreak of a deadly plague in one of the asteroid groups. As near as can be determined, it was spread by the crew of an exploratory rocket after the discovery of a new asteroid. It began to sweep through the mining colonies out there with the velocity of an expanding nova!"

"Where was your Health Depart-

ment?" asked the man named Brecken in a sneering tone.

Varret frowned at him. "Several members gave their lives trying to learn the nature of the disease. We have no information to date, except a theory that it attacks the nervous and circulatory systems, because the reports indicate that the reason of the victim is markedly affected as the disease progresses. Not a single survivor is known—they all die in raving insanity. We do not even know with certainty how it is communicated."

"What are you doing?" asked Phillips.

"Isolation. It is all we *can* do, until our medical men can make some progress. We evacuated an asteroid colony and began to ship into it any person showing any of the symptoms, using a cruiser piloted by remote control. That was where we slipped."

"How?"

"On the last trip—unless we have not really collected *all* the sufferers—we lost control. Someone being transported knew his spaceships. Shortly thereafter, a gibbering lunatic got on the screen and threatened the escorting rocket. He announced the cruiser would head for Mars, where the passengers would demand their freedom. They are past reasoning with."

"Can't say I really blame them," Phillips remarked.

"Blame them? Of course not! Neither do I. What has that to do with it? What has the Council so worried is that this thing will get loose on Mars, that it may even be carried to Earth and Venus. There are over a hundred persons in that ship, no longer responsible for their actions but capable of causing deaths by the billions. We *want* to help them, but we simply must hold the line on this quarantine until we solve the medical problem."

• **THEY STARED AT HIM IN** silence, and Phillips noticed that the old man's forehead was moist with tiny beads of perspiration.

"Don't you see? They are as good as dead. No knowledge or help of man can save them—as of this moment. If we are *ever* to be of any help, we must prevent a worse catastrophe."

"Yes, the survival ship is a world in itself, but this world must die!"

For a minute or two, it seemed to Phillips that he could hear each person in the control room breathing. Finally, there was a small sound of cloth rubbing on metal as Brecken stirred. "Why pick on us?" he rasped from his seat on the deck. "I'm no volunteer!"

"I know what you are," replied Varret sharply. "I know what you all are. You have been chosen for this mission of murder, because you are the only people in our culture who are capable of this kind of violence. You have broken our laws, and this is your punishment."

"It would take us too long to find others like you who had merely never faced the same circumstances that sent you four to Luna. We have made attempts to attack this vessel. Manned by normal men, our ships could accomplish nothing."

"Why not?" asked Phillips.

"*The crews found they could not kill!*"

"What?"

"It amounts to that. One pilot blacked out at the start of an offensive approach. He lost contact before recovering—you realize how quickly that happens at interplanetary speeds. On several other ships, there were passive mutinies. One was destroyed; how, we do not know."

"Why don't you get some *men* in your Department of Security?" sneered Brecken.

Varret sighed. "It was far from simple cowardice. The crews had fine records. We have been civilized too long, so long that the idea of deliberate killing unnerved them. As to the one ship that did make some motion to attack, it may have been destroyed by the cruiser's defenses, or even by sabotage. Somebody may quite possi-

bly have found the mission too repulsive to face with complete sanity."

He was interrupted by a uniformed man, who slid the door open and gestured significantly. Varret paused. He nodded, and the newcomer retired.

"I have only a few minutes," said the old man, facing them again. "To be brief, this patrol vessel is armed with the best we have in guided atomic missiles and sensitive detection devices. Technical manuals are supplied for everything we could think of, though I doubt you will need them. We have brought you to within a few hundred miles of *them*."

"In a few minutes, my men and I will transfer to an escort ship. We will slip in behind Deimos, not too far away, and pick you up afterward to land you on Mars. Any questions?"

"Yes," said Phillips.

"What?"

"Why should we do anything at all?"

Varret's lips tightened. A guard shrugged contemptuously. "I was told to expect that attitude," the old man admitted. "I suppose it is part of the character we now think is needed for such an expedition."

"You could hardly expect co-operation," Phillips pointed out. "Laws against any kind of homicide are all well enough, but I for one don't see why I should draw the same sentence as a murderer. I had to protect myself or die—probably through having that crazy fool blow up my rocket room."

"You'll make a cold landing on Sol before you'll get any help from me!" Brecken added defiantly.

The girl said nothing, but Truesdale muttered darkly.

"Please!" said Varret. "I have no time to argue about our social and legal codes. The Council foresaw that the threat of being yourselves subject to this plague might not be enough. If you succeed in destroying or even immobilizing the cruiser, I can offer you anything you want short of unsupervised liberty. You

must still be watched as potential dangers to society, but you may otherwise be as wealthy or independent as you wish."

He motioned to the guards, who had begun to fidget impatiently; wordlessly they left the compartment.

"You can settle your relations among yourselves," said Varret. "We chose Bailey partly because she has piloted rockets privately, and Phillips because he was a space engineer. Perhaps Brecken could handle the torpedoes—I do not know." He rubbed his chin uneasily. "Frankly, I find intimate discussion of the affair repulsive. I hope you will decide to do what is necessary for the welfare of Earth."

He turned abruptly and left the control room. They heard distant voices exhorting him to hurry.



BRECKEN arose and crept furtively to the door. He leaned out to peer down the corridor. The nervous Truesdale bounced up to crowd behind him. Phillips and the girl looked at each other; she shrugged, and they too got to their feet. She turned to the instrument panels; and after a moment, Phillips joined her.

"How have they got it?" he asked. "Controls locked?"

"No," murmured Donna. "Don't need to; we're just coasting. Nice job, though. Fast as a racer, I imagine."

"You know something about racers?"

"I used to think I did," she answered shortly.

He saw pain darken her blue eyes and decided to probe no further. Instead, he wandered about, inspecting the instruments. A few minutes later, with a spaceman's indefinable alertness, he felt a change in the ship.

"They still aboard?" he called to Truesdale, who remained at the door although Brecken had disappeared.

The youth glanced over his shoulder but did not trouble to reply. Phillips' jaw set, and he took a quick step toward the other. Before he reached the doorway, however, Brecken returned from the corridor. Shouldering Truesdale aside, he strode into the control room. "Well," he announced, "the old fool hopped off like he said. Got a viewer in here?"

"I have it on now," called Donna from the instrument desk. "There he goes."

They gathered around the screen to watch. Near one edge was the image of another ship, with several spacesuited figures clustered around its entrance port. The girl made an adjustment, and the view crept over to the center of the screen just as the last of the figures vanished into the opening. Almost immediately, the other rocket slanted away on a new course.

Donna followed it on the screen until the brief flashes of its jets were dimmed by a new radiance—the ruddy disk of Mars. "We *are* where he said," she admitted. "Now what?"

She looked at Phillips, who merely shrugged. "What do you make of it?" she insisted.

"Pretty much as he said, probably," answered the engineer. "He's heading for Deimos, I suppose. I hear they're landscaping the whole moon—it's only about five miles in diameter—and building a new space station for a radio beacon and relay."

"Does that log say anything about the plague ship?" asked Truesdale nervously.

Donna scanned the observation record, then adjusted the viewer. The red radiance of Mars fled, to be replaced by a dimmer scene of distant stars.

"In there someplace," she said. "Out of range of this screen, but we could probably locate it with detector instruments."

"Why all the jabber?" demanded Brecken. "Let's get going!"

Phillips stared at him. "What's the rush? Did he sell you that easily?"

"Huh? Oh, hell, no! I mean let's make a dive for Mars. They were dumb to set us loose with a fast ship. We're dumber if we don't use it!"

"That's right," agreed Truesdale eagerly. "We don't owe them anything. They owe us; for the years they took out of our lives!"

● **TRUESDALE HAD A POINT** there, Phillips felt. This could grow into quite a discussion, and he was not sure which side he wanted to take. He had no great urge to become a hero, but on the other hand there was something about Brecken that aroused a certain obstinacy in him.

"Wait a minute!" Donna protested; "what do you think you're going to do?"

"Slip into a curve for Mars," said Brecken. "Slow down enough to take to chutes an' let this can smack up in the deserts somewhere. They'll never know if we got out, an' we'll be on our own."

The girl turned to Phillips. "How about you?" she asked. "Don't you think we should at least consider what Varret told us? If this plague is as dangerous as he says, this is no time to—"

"Do you *have* to be so bloodthirsty?" complained Truesdale.

"I don't want to kill anybody," declared the girl; "maybe we could just disable the cruiser."

"Aw, kill your jets!" Brecken broke in. "I've been waiting for a chance like this for years. Don't get any ideas!"

"But listen!" pleaded Donna. "It's a terrible thing, but if we don't do it, we won't be safe on Mars ourselves; they'll land and set an epidemic loose."

"I'll take my chances with it," said Brecken. "You're supposed to know something about piloting. Now get

us on a curve for Mars, an' be snappy about it!"

Donna turned desperately to Phillips.

"Why not look over the ship," the engineer suggested, "before we blast off on half our jets? We can make up our minds when we see what we have for fuel and weapons."

Brecken opened his mouth to object, but was smitten by an unpleasant thought, "Suppose they didn't leave us enough fuel to make Mars!"

"We can find out soon enough," said Phillips, leading the way to the door.

They trooped down the corridor on his heels, past the few closet-like compartments set aside for living quarters. It was a single-deck ship, with storage compartments above and below for fuel, oxygen, and other necessities. The corridor was liberally supplied with handrails, apparently in case of failure of the artificial gravity system.

About halfway to the end, another passage crossed the fore-and-aft one, and a few steps farther was a ladder. This extended up and down a vertical well, which in space amounted to a second cross corridor. Phillips was right when he guessed that the door beyond opened into the rocket room.

The others were bored by the power plant of the ship. The engineer, however, could not repress a thrill at once more standing surrounded by the gauges, valves, and pumps with which he had formerly lived. He strode about, examining and comprehending such appliances as seemed new since his last service in space.

"How about it?" demanded Brecken. "Can you handle it?"

"Sure," answered Phillips confidently. "Mostly automatic anyway."

"Then we can get movin' whenever we want?"

"I suppose so. The tanks are nearly full; let's find those space torpedoes the old man mentioned."

"Maybe it won't hurt, at that," grumbled Brecken.

HE LED THE WAY OUT, BUT paused indecisively. Phillips stepped past him and considered the cross passages near the midpoint of the corridor. Those in the plane of the control room deck probably led to port and starboard airlocks, he reasoned, so the others might lead to the torpedo turrets.

He went to the vertical well and started up the ladder, hearing the others follow. At the top, he was confronted by a hatch with a red danger sign. Glancing about, he located the gauges that reported the air pressure beyond. Normal.

"Make a little room," he said, looking down to Brecken.

The big, ruddy face retreated a few rungs. Phillips could hear the others scrambling further down. He got his head out of the way before pulling the switch that opened the hatch. With a subdued humming of electric motors, the massively constructed door swung down. One after another, they pulled themselves up into the compartment.

"This must be where they set controls for launching," guessed Phillips, leaning back against a rack of emergency spacesuits. "That intercom screen on the bulkhead is probably plugged in to the control room. Looks as if the torpedoes themselves are stored under that hatch at the after end."

"How do they kick them off?" asked Brecken.

"Those conveyor belts run them into tubes in the forward bulkhead. A charge of compressed air blows them out, and then the rockets are started and controlled by radio."

"You mean we have to point at a target to fire?"

"Oh, no. Once the rockets are going, the torpedo can be maneuvered and aimed anywhere by remote control."

"I've seen enough," announced Truesdale. "I'm hungry."

At that, they all decided to return

to the main deck. Phillips carefully closed the airtight hatch as they left, then followed the others in search of the galley.

Later, after a very unsatisfactory meal of packaged concentrates, they loitered sullenly in the control room once more while Donna studied the controls. Phillips had finally decided that he could wear the third spacesuit on the rack if he had to. He was idly examining the tools supplied with it when his thoughts were interrupted.

Young Truesdale had been monkeying with a range indicator for some time, but now his sharp outcry drew all eyes to him.

The others immediately gathered to peer over his shoulder. A needle flickered wildly from one side of the dial to the other.

"Here! Get it balanced," said Phillips, thrusting a powerful arm between the crowded bodies. As his deft adjustment steadied the needle, he stepped back and leaned against the bulkhead to study their faces. Truesdale's was pale.

"It's them!" he panted.

"Well," asked Donna, "what will it be?"

"Whaddya mean?" demanded Brecken, red-faced. "It'll be get dam' well outa here, that's what it'll be!"

"Let's see you go," invited the girl coolly. "How well do *you* pilot a rocket?"

Brecken's jaw dropped. "Wh-wh-what? You crazy? Did you swallow all that stuff the old man told you?" he sputtered.

"Why not?" asked Donna. "They didn't bring us all the way out here for nothing. Varret was scared. If it's that dangerous, somebody just has to do it—and we're here!"

"Not for long," said Brecken in an ugly tone. "Get hot on those controls. You, Phillips! Run back to that rocket room and see that things work!"

"You try it," suggested the engineer quietly.

He would have preferred to avoid shoulder first, and they both brought

the trouble the girl had been stirring up, but he did not relish Brecken's tone. A few days off Luna, he reflected, and already he was getting independent.

"Listen," said Donna, encouraged in her defiance, "when I touch those controls, we'll go right up and touch noses with them. You'd better have a torpedo ready!"

She turned to the banks of buttons and switches. Muffled thunder from the stern jets trembled through the hull as the men staggered.



BRECKEN recovered his balance first. With a snarl, he grabbed the girl by the nape of the neck and shook her roughly. Glimpsing Phillips' cold sneer, he reached back and seized a heavy metal bar from the spacesuit rack.

"Now, dammit!" he grated. "You'll do like I tell you! And *you* get back there an' see that those tubes recharge okay!"

Phillips felt a hard anger swelling his throat. From the corner of his eye, he saw Truesdale shrinking back against the bulkhead. He glanced about desperately for something with which to parry Brecken's bar.

It was the girl who broke the tense silence. With a gasping intake of breath, she reached up to claw at Brecken's face. Cursing, the man twisted his head away to protect his eyes. He released his grip on the girl's neck and swung a clumsy, backhand blow at her head. Donna stumbled, and collapsed to the deck.

Now or never, Phillips told himself. Without waiting to think, he hurled himself forward.

Brecken saw him coming, and tried to shift around to meet the engineer's charge. Phillips crashed into him

up against the opposite bulkhead with a thud. He concentrated all his strength into wringing the other's forearm until he heard the bar clang to the deck.

Brecken clubbed him on the side of the head with a wild left swing, and Phillips found the big man's foot in the way when he tried to sidestep. He lost his balance, but kept his grasp on the other so that they went down together, thrashing about for some opening. Brecken was red-faced with a maniacal rage. Beads of saliva sprayed from his twisted lips as he sputtered curses.

The engineer let go suddenly and jolted the other under the chin with the heel of his left hand. The man arched backward, but Phillips caught a knee in the chest that sent him slithering across the deck. As he strove to twist to his hands and knees, he saw Brecken groping for the bar.

Never reach him, thought Phillips frantically.

Thrusting one foot against the leg of an anchored data desk, he raised himself half upright as he lunged desperately at Brecken. Strangely, it occurred to Phillips for a fleeting lapse of time that old Varret had been reasonably astute in his selections, if he desired violent-tempered throwbacks. Then the breath was knocked out of him as he smashed into Brecken with a force that sent them both hurtling into the bulkhead.

The other's grunt of pain was almost lost beneath the sharp smack of bone against metal. Phillips scrambled up hastily, but his opponent lay still.

Over by the data desk, Donna was beginning to squirm quietly and make groping motions with her outstretched hands. Truesdale had retreated to the forward end of the control room, his features blanched by apprehension.

I'll bet, thought Phillips, *that old Varret slipped up in your case, my lad. Your reaction to violence must be what they call normal.*

He beckoned brusquely. "Give me a hand with him," he ordered.

Brecken still showed no sign of consciousness. Truesdale approached warily, and with his aid Phillips lifted the unconscious man. With their burden limp in their hands, they staggered down the corridor to one of the sleeping compartments. There, they slung him into a bunk.

"He needs attention," said Truesdale.

"He won't get it from me," snapped Phillips. "Lumps on the head were his idea; there's no time to fool with him."

He pulled the sliding door shut, noticing that it had no lock. Since Brecken would probably be some time recovering, however, he put that out of his mind.

HAVING RETURNED TO THE control room, they discovered Donna sitting up. At the sight of them, she pulled herself somewhat shakily to a standing position, and brushed back her blonde hair.

"What happened?" she asked.

"He bumped his head on the bulkhead," said Phillips shortly.

This was accepted without comment. They turned to the instruments and examined the dial of the range indicator.

"They aren't very far away," said Donna quietly. "Where do you stand now, Phillips?"

"I suppose we'd better do it," he admitted. "Pretty vicious, aren't you?"

"No!" she snapped. "I don't like it either; I've never caused the death of any human being."

"Oh, sure. That's why you were on Luna!"

She looked at him levelly in the eye, but her shoulders drooped a trifle with the resignation of one who has often been disbelieved.

"My husband was a nice guy," she murmured, "but he never did know when he had a drink too many for piloting his jet. He passed out trying to give me a wild ride, and I got to

the controls just in time to crash-land the rocket; that's where they found me before I came to."

"Oh," said Phillips.

"I'm not half as hard as I'm trying to pretend," Donna went on, "even after a year on Luna. But I was a nurse before I was married. I'm thinking about what it will be like if this plague hits the planets before they find something to fight it with. The children... imagine that, will you?"

Phillips stared at the range indicator. It seemed there were times when an ugly thing had to be done for the common good. He wondered how the old-time executioners had felt, in the days when there had been judicial homicide. There were still jailers, for that matter, and men who butchered cattle.

"Call it a mercy killing," murmured Donna between pale lips. "Maybe you think *that* isn't still done once in a while, in spite of modern society."

"Ummh," Phillips grunted. "Well, if you can watch at this end, Truesdale and I can go set up a couple of torpedoes. I hope those rocket blasts didn't give us away."

"According to Varret," said Truesdale, "there can't be many of them still able to think straight enough to stand on watch. I wonder what it's like..."

Phillips glanced askance at him, but led the way into the corridor. First of all, he stopped at the rocket room to check the tube readings. The fired jets had been automatically recharged.

• THEY LEFT THE ROCKET room and climbed the ladder to the turret. Once inside, Phillips spent the first few minutes inspecting the equipment and thumbing through the manuals left there by Varret. Finally, the bored Truesdale broke in upon his study.

"That old goat must be crazy to think he could toss us out here and have us act like a trained crew. How

can we even hope to do anything right, without blowing ourselves up?"

"We can try," said Phillips coldly. "It shouldn't be impossible to get one started, at least."

He found the twin control panels in the bulkhead, and pulled a pair of switches. There was a smooth humming and a slight click as two hatches in the deck slid open. Slanting metal chutes rose out of the dark apertures, just behind the conveyor belts.

"Look at those babies!" breathed Phillips.

The snouts of two miniature spaceships protruded from the storage hold. Phillips touched other switches, and the sleek missiles were prodded onto the belts and moved forward until the full, twenty-foot lengths were in view.

"Phillips, you better be careful with those things!" quavered Truesdale as the engineer unscrewed a small hatch on one.

"Afraid I'll blow it up?" asked Phillips, peering inside.

"Why not? You never touched one before."

"You go ahead and believe that," retorted the engineer. "Now, I'll just turn on the radio controls, check the batteries, and feed the bad news into the launching tubes. Watch!"

Replacing the hatch and securing it, he thought out the procedure to use at the remote control panels. Turning on the screen above one of them produced a cross-haired image of the bulkhead directly in front of the near torpedo. He tried various manipulations until he had focused the view and caused it to sweep all around the interior of the turret. After idly watching himself and Truesdale appear on the screen, he returned the view to dead ahead, switched it off, and turned to the other panel.

"I guess I can finish checking," he said.

Truesdale clambered hastily down the ladder. Phillips shook his head. "Don't know what use he'll be," he

muttered. "Too bad Brecken wouldn't listen. He at least...oh, well!"

He wondered whether he himself would stand up when the time came. What Varret had asked did not sound like much. Just a quick shot and watch them blow apart. What inhibitions made men black out rather than carry it through? It was not as if there were any hope for these people. Surely, it was obvious that to permit them, in their deranged state, to spread a catastrophic plague was inconceivable. But perhaps emotions were stronger than reason.

"I'll find out pretty soon," he reflected.

There was little more to do in the turret, except to run the torpedoes into the launching tubes and bring up a new pair in reserve. With that much done, he closed the hatch and climbed down the ladder.

•IN THE CONTROL ROOM, HE found Donna and Truesdale peering into the screen. He crowded close to look over their shoulders. A small blob of light floated near the center of the view. "That it?" he asked.

"Yes," answered Donna. "Just enough Mars-light to show it."

"How near are we?" asked Phillips.

"About a hundred and fifty miles. I have quite a large magnification, but they may spot us if they're alert. Are you ready to...do something?"

"Reasonably," said Phillips. "Where's Brecken?"

"You probably *killed* him!" Truesdale broke in accusingly.

"I found a first-aid kit and gave him a shot," said Donna. "He has a nasty lump on the head, but he might sleep it off."

Phillips was watching Truesdale. The youth was visibly nervous. Was it the thought of Brecken, the engineer wondered, or fear of what they were planning to do? Perhaps it would be

best to clear the air now, before it was too late.

"I guess you can handle it here, Donna," he said. "Truesdale and I will go to the turret and stand by."

The youth shrank away. "No! I won't go up there again! You can't make me do this!"

"Do what?" demanded Phillips.

"It's *murder*! You both know it is! They won't even have any warning."

"I *hope* not," said Phillips drily. "They might get *us*!"

"You *would* put it that way," sneered Truesdale; "you're homicidal at heart anyway!" He turned on Donna, wiping perspiration from his forehead. "Are you going to let him do it?" he shrilled. "Are you going to help him commit such a crime?"

The girl stared at him with a worried look in her blue eyes but said nothing.

"Come on, Truesdale," said Phillips, making an effort at a peaceful, persuasive tone. "It will be either their lives or ours if they spot us—and millions more if they get by. They'll be too desperate to think of us. Do you want to die?"

The instant he spoke the last words, he remembered the other's record and wished he had kept quiet. He saw a strange, wild expression creep over Truesdale's features. It changed into a look of hateful cunning as the youth began to sidle toward the door.

"I'm not afraid to die!" he boasted in a low-pitched but tense voice. "But how about you, Phillips? How about the big, brutal space engineer who is proud of smashing men's skulls against steel walls, who would like nothing better than to blow up a shipload of innocent people. How do you really know they're dangerous? But you don't care, do you?"

"Truesdale!" snapped Phillips. "Calm down!"

"I'll calm you down with me!" shouted the other hysterically. "I'll *show* you who's afraid to die!"

He ducked through the door toward

which he had been backing. Phillips lunged after him, just barely missing a grip.

"On your toes!" he shouted over his shoulder to Donna, and turned on all jets.

But Truesdale, driven by his peculiar fury, not only stayed ahead as they raced along the corridor, but actually gained.

He was fifteen or twenty feet out in front as they reached the midway point. Phillips, expecting him to take refuge in the rocket room, was completely fooled when Truesdale leaped for the ladder in the vertical well. He stumbled, and grabbed a handrail to stop himself. The other was swarming upward. Phillips sprang to follow.

Hardly had he climbed half a dozen rungs, however, than he saw he was outdistanced. Truesdale's feet were already disappearing beyond the hatchway. Phillips waited for the airtight door to slam shut. It remained open...

Then a thrill of instinctive fear shot through him as he thought of what Truesdale might do—probably was *doing* at that very instant!



THROWING his feet clear of the rungs, he plunged back toward the deck, guided only by his hands brushing the sides of the ladder. As Phillips reached the junction of the passages, he kicked desperately

away from the ladder. He landed with a thump that would have hurt had he been in a calmer state.

Rolling over toward the control room, he came to his feet in time to glimpse Donna looking out the doorway before a jarring shock floored him again.

The deafening roar of an explosion resounded in the corridor as a brilliant light was luridly reflected from somewhere behind him. The bewildering force hurled him at the deck; he saw he could not prevent his head from striking—

Phillips found himself on hands and knees, staring stupidly at the deck a few inches past his nose. As in a nightmare, he seemed to spend an eternity pushing himself painfully to his feet. Clutching a handrail, he finally made it.

He saw Donna kneeling in the doorway, hand to head. As he watched, the girl looked at her hand, and dazedly pulled out a handkerchief to wipe off the blood.

Then Phillips became aware of a high breeze in his face. Behind him, the sound of rushing air rose to a moan, then to a shriek. That shocked him to his senses.

"*Button up!*" he screamed above the noise, bringing his hands together in an urgent gesture understood by all spacemen.

As the girl staggered to her feet, he whirled and leaped toward the junction of the cross corridors. He wasted no time in a vain glance upwards—he

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knew what Truesdale had done. Only setting off the torpedoes' rockets in the enclosed turret compartment would have caused an explosion just severe enough to rupture the ship's skin; if the warheads had gone off, he never would have known it.

Diving headlong through the opening in the deck, he experienced a dizzying shift of gravity as he passed through the plane of the main deck. When he had his bearings again, he scrambled "up" the ladder toward the belly turret. By the time he got the airtight hatch open, he was beginning to pant in the thinning air. He pulled himself through at last, and sealed the compartment.

Phillips sucked in a deep, luxurious breath while he glanced about. This turret, he saw, was a duplicate of the other. He immediately located the intercom screen and called the control room. Donna's worried face appeared. "Where are you?" was her relieved inquiry.

Phillips explained what had happened. "The only thing," he concluded, "is to try it from here."

"I think they must have spotted the flash," Donna told him. "The instruments show a shift in their course."

"Blast right at them!" said Phillips. "We might get away with it if we're quick."

He turned away, leaving the intercom on. A few quick steps took him to the control panels in the bulkhead. Guided by his lessons in the other turret, and by faded memories of space school on Earth, he brought up two of the torpedoes. He checked the radio controls and ran the missiles into their launching tubes. As he worked, with nervous sweat running down into his eyes, he was aware of the intermittent jar of rocket blasts.

"Run 'em down!" he muttered, trying to steady his hand on the controls.

He had a hand at each panel, with the torpedoes poised viciously in the tubes, when he heard Donna's shout,

shrill with excitement, over the intercom.

Instantly, he launched the missiles. He started the rockets by remote control, and scanned the screens for a sight of the other vessel.

For a moment, his view was confused by the expanding puff of air; then that froze, and drifted back to the hull, and he could see the stars.

•DONNA'S VOICE, STRAINED

but coldly controlled, came over the intercom with readings from her instruments. He corrected his courses accordingly.

Then he saw the image of their target centered on one screen, so he concentrated on steering the other missile. He made the nose yaw, but was unable to locate anything on its screen.

"You're sending one of them too far above, I think," Donna reported.

"I have something wrong," he shouted. "I can't spot them at all for that one. The jets must be out of line and shooting it in a curve."

Nevertheless, he fired a corrective blast on the weight of the guess, before returning his attention to the first torpedo.

This one was right on the curve. He could see the massive hull of the cruiser plainly now. It was almost featureless until, as he watched, several sections seemed to slid aside.

The screen showed him a momentary glimpse of a swarm of small, flame-tailed objects spewing forth from one of the openings. Then the view went dark. "Interceptor rockets with proximity fuses," he muttered. "They'll be after us next, crazy-mean and frantic!"

Over the intercom, he heard Donna exclaim in dismay. He caught a fleeting sight of her face and realized that the situation must be torture for the girl, as for himself or any normal person of their civilization.

Cursing himself for an optimist, he raised two more of the missiles from

the magazine. Hopping about like a jet-checker five minutes before take-off time, he made them ready. It seemed like hours before he got them into the launching tubes and blew them out into the void.

Again, he watched the other vessel appear ahead of his torpedoes, this time on both screens. Before the gap narrowed, he had a better opportunity to see the defenses of the cruiser in action.

A whitish cloud of gas was expelled from his target's hull, bearing a myriad of small objects which promptly acquired a life of their own. Both screens were filled with flashing, diverging trails of flame. Then—nothing.

"They're heading at us!" called Donna. "Hang on!"

Phillips had already pulled the switches to bring up a new pair of torpedoes. Hearing the urgency in Donna's tone, he leaped toward a rack of spacesuits and grabbed.

•THE NEXT INSTANT, HE was pinned forcibly against the rack by acceleration, as Donna made the ship dodge aside. From one side, he heard a screech of grating metal. The fresh missiles must have jammed halfway out of the storage compartment.

It gave him a weird feeling of unreality; as he hung there helplessly, to see one of the screens on the bulkhead pick up something moving, gleaming, metallic.

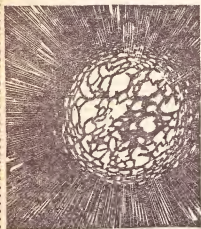
"Donna!" he shouted hoarsely. "Let up!"

"I don't dare," she gasped over the intercom. "I lost them, but they were starting after us!"

"Let up!" repeated Phillips. "They're dead ahead of that wild shot of ours. Let me get to the controls!"

He dropped abruptly to the deck as the acceleration vanished. One leap carried him to the radio controls.

The metallic gleam had swelled into a huge spaceship. The cruiser was



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angling slightly away from the point from which he seemed to be viewing it. How soon, he wondered, would they detect the presence of his torpedo? Or would they neglect this direction, being intent upon the destruction of those who were attempting to frustrate their mad dash for Mars?

Phillips stood before the screen, clenching his fists. There was, after all, nothing for him to do but watch. The gleaming hull expanded with a swelling rush. Details of construction, hitherto invisible, leaped out at him. A crack finally appeared as a section began to slide back.

This time, however, there was no blinding flare of small rockets. The blacking out of the screen coincided with Donna's scream. "*It hit!*"

In the silence that followed, he thought he heard a sob.

"Oh, Phillips," she said, recovering, "we did it. They're—"

"Hang on," said Phillips. "I'll climb into a spacesuit and come forward."

He switched off the intercom and dragged a suit from the rack. It took him a good fifteen minutes to get the helmet screwed on properly and to check everything else. He realized that he was very tired.

He opened the exit hatch, seized the top of the ladder in his gauntlets as the air exploded out of the turret, and climbed back to the main deck.

Clumping forward through the airless corridor, he stopped to look into the compartment where he had left Brecken. He quickly slid the door shut again.

He found that Donna had sealed off the corridor just short of the control room by closing a double emergency door that must have been designed to form an airlock in just such a situation. He hammered upon it, and she slid it open from the control desk.

It closed again behind him, and he entered the control room through the usual door. The girl helped him to remove the suit and motioned him toward the screen.

•PHILLIPS REGARDED THE scene without enthusiasm. The sight of the dead man had reminded him of what the compartments of that other vessel must look like by now. Its parts were beginning to scatter slowly.

He looked at Donna, and found her regarding him soberly. "What will they do with us now?" she asked.

She looked exhausted. He extended an arm, and she leaned against him. "You heard what Varret said," he told her.

"Yes, but will he keep his word? They might be...ashamed of us, now that it's done. Even if they're not, I can't bear the thought of going back to Earth and having them stare at me!"

Phillips nodded. He remembered the morbid curiosity during his own trial, the crowds who had watched him with a kind of shrinking horror—and he had actually been responsible for saving a spaceship and its crew, had they cared to look on that side of the affair.

But he had killed. That was no longer the action of a normal human being, according to popular thinking.

"I guess you and I are the only ones who will understand one another from now on," he shrugged.

Donna smiled faintly, just as the signal sounded on the communication screen.

It was Varret, looking pale and strained. He listened to Phillips' account, including the deaths of Truesdale and Brecken, and apologized for his appearance. He had, he informed them, been unpleasantly ill when he had seen the explosion. "It was a terrible thing," Varret continued sadly, "but necessary. They were beyond reasoning with, and a deadly menace."

He pulled himself together and tried to hide his agitation by reminding them of his promise. He suggested that they consider their requests while his ship attempted to tow them in to Deimos.

Phillips glanced speculatively at Donna. They would be two outcasts, however much their deed might be respected abstractly, however much official expressions of gratitude were employed to gloss over the fact. He might as well take one chance more. "We have already decided," he said boldly. "I hear you are building a new space station on Deimos."

The old man nodded, surprised.

"We will ask for a deed to that moon, and a contract to operate the beacon and radio relay station," Phillips stated flatly.

Varret blinked, then smiled slightly in a sort of understanding admiration.

"Reasonable and astute," he murmured after a moment's hesitation. "I think I appreciate the motive. Perhaps, if that ship can be repaired and remodeled, we can include it so that you may make short visits to Mars."

He warned them to watch for the emergency crew he would send to their aid, and switched off.

Phillips then dared finally to turn and look inquiringly at Donna. Her smile was relaxed for the first time since they had met. "Nice bargaining," she said, and Phillips felt like the king of something larger than a tiny Martian satellite.



GENESIS

(Continued From Page 21)

take us to Tareesh, and we'll have houses and ground-cars and aircraft and gardens and lights, and all the lovely things we want. Aren't you, Dard?"

"Yes, Varnis; I will take you all to Tareesh, to all the wonderful things," Dard, son of Dard, promised, for such was the rule about Varnis.

Then he looked down from the pass into the country beyond. There were lower mountains, below, and foothills, and a wide blue valley, and, beyond that, distant peaks reared jaggedly against the sky. He pointed with his father's axe.

"We go down that way," he said.

● **SO THEY WENT, DOWN, AND** on, and on, and on. The last cartridge was fired; the last sliver of Doorshan metal wore out or rusted away. By then, however, they had learned to make chipped stone, and bone, and reindeer-horn, serve their needs. Century after century, millennium after millennium, they followed the game-herds from birth to death, and birth replenished their numbers faster than death depleted. Bands grew in numbers and split; young men rebelled against the rule of the old

and took their women and children elsewhere.

They hunted down the hairy Neanderthals, and exterminated them ruthlessly, the origin of their implacable hatred lost in legend. All that they remembered, in the misty, confused, way that one remembers a dream, was that there had once been a time of happiness and plenty, and that there was a goal to which they would some day attain. They left the mountains—were they the Caucasus? The Alps? The Pamirs?—and spread outward, conquering as they went.

We find their bones, and their stone weapons, and their crude paintings, in the caves of Cro-Magnon and Grimaldi and Altimira and Mas-d'Azil; the deep layers of horse and reindeer and mammoth bones at their feasting-place at Solutre. We wonder how and whence a race so like our own came into a world of brutish sub-humans.

Just as we wonder, too, at the network of canals which radiate from the polar caps of our sister planet, and speculate on the possibility that they were the work of hands like our own. And we concoct elaborate jokes about the "Men From Mars"—ourselves.



ELIXIR

By James
Blish

Over and over, like a phonograph, the man repeated his message: "A ship is burning... a ship is burning." Yet, how could there be fire in space, without medium for combustion? Then they saw the cloud of sparks approaching...

IN THE ABSOLUTE blackness, the drumming of Vickers' fingernails on the control-board was like some eccentric trip-hammer. Jimmy Lane twisted protestingly in his hammock. "Captain," he said hoarsely. "Could you—I mean, do you have to do that?"

"Sorry." The drumming stopped.

"If he doesn't get here in another three minutes, we might just as well climb out of this sink-hole and give ourselves up," Elton said calmly. His voice was muffled; evidently he was lying with his back to Jimmy. "Without the serum itself, no one will believe a damn word of it."

"He'll get it," Vickers said. "And on time; you youngsters don't know Paul Walker."

That seemed to settle that. It didn't take much of the tension out of the stale air, all the same. The putative reliability of Paul Walker didn't dispose of the fact that the rest of them were canned in a tiny ship, while two hundred feet above them, on the frigid surface of Ganymede, a drug-driven mob of uniformed thugs was closing upon them—and, presumably, upon Walker, too.

It especially failed to dispose of the staleness of the air. Until Walker came, no current could flow in the little ship; and even with both airlock ports open there was no circulation. It was ironical to consider that the ship lay in a ventilating shaft, one of nine that kept the environment livable

in the underground plant that made Luris' serum. All that air; all that serum. For a moment Jimmy thought he'd be glad to swap the serum for a breath of the air.

Then he thought better of it. The serum was the only thing that gave their present situation meaning. It maintained Emile Calve's scabrous "empire"; the plant where Luris made it was the focus of Ganymede's underground group; and—if it could be gotten out of Ganymede—it promised not only an end to Calve's two-bit totalitarianism, but also incredible gifts for every living human being.

Luris had scoffed at that. "Sure, there's immortality in it," he had told Jimmy. "And regeneration. *And* auto-therapy. But some integration of the personality is necessary to begin with. They're using it as dope up above—don't look so damn shocked, you wouldn't be working in the plant if you weren't at least faintly aware of the facts of life on Ganymede—and that's the way it'll be used if it ever gets off Ganymede. Bluntly, that's why I'm working for Calve. We have one purpose in common: to keep the serum here; our motives differ, but Calve isn't picky about motives."

No, Calve wasn't picky; he was probably watching Paul Walker being put through a catholic selection of tortures right now.

There was a sudden scrabbling in the companionway, like a cat trying to get out of a box. It was quite impos-



Jimmy plotted his course carefully, to take himself safely out of the area of the burning ship.

sible that an outside Negro could make so small a sound—

"Got it," Walker's voice said, with gentle satisfaction. "I shut the lock; make it quick, they're right on my tail."

Vickers gave him only a few seconds to get into his hammock. Then, with an unexpected gesture of bravado, he turned on all the ship's lights. Jimmy was in the middle of a chuckle when the blast-off hit him, and then it was very dark indeed all over again.

He was just struggling back to consciousness when the first bomb ripped

away the drive, tumbling him, bewildered, back into night for the third time.

WALKER lay on the foam seating that circled the control room. His head was bound elaborately, and his face was as wan as the pale stars in the ports over his head. He was completely motionless, breathing shallowly.

Then his lips moved. He began to speak, in a sing-song, utterly empty voice. "A ship is burning."

Jimmy watched, rumpling his hair

Certain crustaceans have remarkable regenerative facilities. Tear off a crab's leg, for example, and the critter can grow a new one. The human body, too, has considerable repair facilities, but there are some parts, such as the lung tissues, or brain tissues, which cannot be regrown; if damaged, these areas will be replaced by scar tissue. But suppose full regeneration were possible, and so long as any part of the brain remained, the whole could be rebuilt—except, in some cases, missing parts would have to be replaced by memory...

over his ringing skull. Behind him, Vickers said, "I keep having the feeling that he's trying to tell us something; it doesn't make any sense, what he says. But maybe he'll go on with it, next time around."

Jimmy swallowed. "It would be a kindness to kill him, Captain."

"No, not yet. This is maddening, but—well, there's nothing else for us to do, now."

"A ship is burning," Walker's voice droned.

It was like a record repeating itself. They all knew it by heart now, and that would follow it. If they came out of this alive, every one of them would be able to repeat Walker's ditty ten—hell, fifty years from now. Or, now that there was nothing left of the little ship but its control room and an empty hull, they could just sit right here and listen to Walker in person for the next fifty years. There were supplies enough, and power enough, and with Luris' serum in him Walker would probably outlive them all—

"Here it comes," Elton said.

"A cloud in space. There are no clouds in space." The stricken man paused. If only he'd vary it, just change the tone of his voice a little—

"The cloud is waiting," Walker said.

Another pause. Jimmy counted. One, two, three, four, five, six, seven, eight, nine, ten, eleven, *now!*

Walker said: "A great cloud of sparks."

There would be a long wait now. Elton turned his back abruptly and walked over to the front viewplate, looking out over the studs which had become nothing but ornaments a day ago. "It's just madness, Captain. Paul has a concussion from the explosion, and only the serum has kept him alive. We're hearing the madness of a dead man."

"Are we likely to be found?" Jimmy said. "I don't mean rescued; that's out of the question now. But if they

found the ship, they could see plainly enough that bombs had been planted in our engine room and under our nose. And there's the serum still intact; it's too simple a substance to break down just through age. Wouldn't they call that proof?"

Vickers nodded. "Yes; I think they would. There's the log, too. And if we're still alive to boot—"

"Still alive?" Elton said. "And *him*, too?" He pointed to the cataleptic figure on the airfoam.

"Why not? Would there be any better proof of the power of Luris' serum? You don't realize, Elton, what it means to have complete conscious control of your own nervous system. Walker, bunged up though he was by the explosions, partly repaired himself. What could a *sane* man do for his own body?"

"How many sane men," Elton said, "do you think this ship will contain by the time Earth finds it?"

"A ship has entered the cloud," Walker droned. "The sparks are all around it. Little flashes of fire are going out from the ship where the sparks touch it."

I don't have to listen any more, Jimmy thought. I can walk over there and put my fingers around Walker's throat and then there won't be that voice any more. Or I can take the torch and cut the hinges off the control room door, and it'll just blow away and we won't any of us have to listen any more.

● IT WAS PAUL WALKER WHO had done most of the work. On a planet where 85% of the population was Negro or of Negro extraction, only Walker had been able to make any real penetration of the fantastic empire of Calve; the rest of them had to be excessively cautious, except for Jimmy himself, who had blended smoothly into the Asiatic 10%. And it was Walker who had brought back the serum, Walker who had made the

promises to the Ganymedian underground—promises that, sometime, would have to be made good by Earth as a whole.

"Captain?"

"Yes, Jimmy."

"Walker might recover; we don't know how far the serum can help him. And he's the only one among us who saw enough of Ganymede to give evidence. I saw the plant and talked to Luris, but it's Walker that gives any project we cook up now its importance."

"My view exactly," Vickers said heavily; "without Paul, we will have failed in our mission. We didn't even know what the mission was until Walker unsealed his orders, for that matter. Of course, the log and the serum should be enough to start an investigation, but if we can wait until we're found, we can cinch it ourselves."

Elton said nothing. He kept his back to them and watched the pallid stars.

"Flashes of fire," Walker said, in an even monotone. "The ship is in the cloud. The ship is burning. I see it. A ship is burning. A ship is burning."

In the Rx cabinet the container of Luris' serum was lying, containing within itself immortality, ecdysis, and things still undreamt. Its fate depended upon four men as good as dead.

"A cloud in space. There are no clouds in space."

Elton said softly, "I see it." His trembling finger pointed. The others turned; after a moment, Jimmy saw it, too.

It shimmered, a mass of radiant sparks. It didn't look very large. Vickers stepped to the board and checked it with the charts.

"I hate to say 'I told you so,'" he said. "But we'll hit it squarely. In about an hour."

Jimmy said, "What is it?"

"Lord knows. Contraterrene, maybe, mixed with a terrene dust storm.

It's not very big—but it looks damned poisonous."

"The cloud is waiting," Walker said.

•THE EMPTY SHIP WAS burning. Jimmy tumbled, already three miles away from it, bandaged in his pressure-suit. The suit clung to him so tightly that it made him feel injured, as if his whole body had suffered the battering that had crushed Walker's skull.

On every fifth turn he caught a brief glimpse of the ship. The twisted hull had already been embraced by the cloud; the sparks danced over it. Along her metallic flanks, a thousand lurid will-o'-the-wisps danced delicately, eating her away. After about half an hour she was burning like a magnesium flare.

The cloud itself was uncomfortably close. Jimmy would have liked to have the torch, but of course Vickers and the precious log and container of the serum had to have that; he had to content himself with the shoulder-jets. The orbit of the ship had been slightly off the center of the cloud, and by using the jets to augment that curve, he might be able to fringe the cloud.

It wasn't a very likely proposition.

He wondered where Walker was now. Was Paul still telling his story in the little auditorium of his pressure helmet, or would the actual destruction of the ship end the strange pre-vision? Odd that they hadn't thought of this possibility until the very end; and amazing that Luris' simple sodium-isotope salt could give even a man with a shattered skull such a glimpse into the future.

But Walker, like Jimmy Lane, was now tumbling end-over-end into nothingness, the serum coursing through his lymphatic system as it now coursed through Jimmy's, and Elton's, and Vickers'. Probably he would not survive, for his brain was too damaged to be capable of willing his body into suspended animation. They had

fired him out into space only because they had loved him; there was no chance that he would survive, and Jimmy had had to talk fast to convince Vickers that Walker should not be left to burn with the ship now that his vision had been realized.

It had been Jimmy's plan from the beginning; at first it had stirred vaguely at the back of his mind when the ship was wrecked; then, it had sprung full-blown into his consciousness.

"Suspended animation!" he'd said. "Captain, why can't we take a shot of the serum ourselves and abandon the ship? We could set a rough course toward Earth with the shoulder-jets, miss the cloud, and slow down our body-processes. It'd take years, but we'd still have the proof. Why, we'd *be* proof!"

● JIMMY TOUCHED THE JET controls. The end-over-end tumbling was nauseating, but he did not dare waste fuel by correcting it. As long as the vector of the motion lay outside the cloud, his actual orbit could tie itself in knots for all he cared.

The terrible flare that had been the ship was diminishing now, deep within the cloud. After a while it had dimmed enough so that he could look at it directly.

Nothing was left of the ship but her skeleton, traced in bright fire. One by one the smaller structural members flared and winked out. The last Jimmy saw of the ship was her massive keel-beam, a sword of flame in the twinkling darkness.

Then that was gone too, and the cloud swelled to devour him.

He fired the jets again, briefly. It was agonizing to have the cloud out of his line of sight three turns out of five. If he were going to hit it, he hoped fervently that it would be face forward—

Something was vaguely wrong with the rhythm of the turning. It took him a moment to realize what it was. The

cloud was in sight now on the fourth turn, had gone out of sight on the first turn. It was—

It was swinging below him.

He'd made it!

Mockingly, a pale will-o'-the-wisp danced over his ribs, then went out, leaving a bright weal in the metal. Jimmy held his breath. But it was the only one: a stray particle of contra-terrene dust, evidently. The cloud plowed along beneath him.

After nearly a day, it was behind him. Methodically Jimmy prepared himself for the quasi-death that would be the body of the trip. It had taken less fuel than he'd expected to miss the cloud; it was now possible to stop the tumbling and point straight at the dim green star that was his home.

And now to slow his metabolism. It would seem no different to him, since he had no reference-points by which to judge his speed. He would be conscious, of course, and the trip would seem very long, no matter how much longer it took by the clock. The dim green star was far away. Jimmy felt his whole being reach out for it in a surge of loneliness.

The sun began to swell, very gently. That was a good sign. It meant that the trip would not seem so long. Yet—could it be that easy? He'd hardly begun to exercise any control—

He looked at his watch. The hands seemed motionless, except for the normal, pulsating progress of the sweep-hand. He knew that, were his metabolism slowed down enough to produce any visible illusion of speed, even the hour hand should be moving so fast as to be invisible. But it wasn't.

But the sun was still swelling.

The apparent speed, then, was—real speed.

The thought was stunning. Through the agency of Luris' simple sodium-isotope biotic, Jimmy's nervous system had reacted upon the basic fabric of the plenum, catapulting him upon the instant into a hurtling projectile faster than any ship. His intense emotional

longing for Earth was being expressed as momentum...

The sun grew. After a while, the green star grew, too. Jimmy felt a sudden flash of alarm, and his nervous system braked him. He soared once around the moon, judging his speed by the flow of the craters beneath him, and dropped.

He took himself delightedly in and out of the stratosphere like a flying-fish, and plunged again. Despite himself, he was still travelling too fast when he snaked through the forest of sequoias which ringed the World Capital, and came out of it with a big green leaf splashed across the top of his helmet as if it had been painted there.

The expression on the face of the Planetary Commissioner when Jimmy shot through the window of his office was a study in outrage.

• JIMMY SAID, "SO THAT'S what he's done, sir. If you dilute the stuff a thousand to one, it increases neural conductivity just enough to give you a lift, like dope. It makes you feel more alert, speeds up your reactions, slightly increases your resistance to colds and all that. But in that dilution, it acts like morphine: you begin to feel lousy when the shot starts wearing off; and there's a period at the end where you have to consciously will your heart to beat and your diaphragm to push up and down—or they won't.

"Calve's built a slave state on that. Outwardly it's the same old Gany-mede, peaceful, progressive, as near to Utopia as you can get in a lousy climate like that. But only because everyone's afraid to talk for fear his shots will be cut off; the few resist-ers are a little group who managed to avoid getting a shot in the first place."

The Commissioner scratched in his stiff spade beard with the point of a stylus. "When we gave Walker his orders, we had no idea it was as bad as this," he said thoughtfully. "I gather

that a shot of the serum full-strength will straighten out the addiction?"

"Yes. The effect is permanent then. After that, there seems to be no limit to the things you can do with your nervous system. Like this."

Still in a sitting position, Jimmy rose solemnly to the ceiling of the office, then sank down again. "Or this." He vanished, and there was the almost soundless little brother of a thunderclap as the air rushed in to fill the space where he had been. A second later he was back.

The Commissioner mopped his brow nervously. "I wish you'd take it easy. I'm still not used to that stuff. Now I suppose you want us to go out there and mop up."

"Why, sure," Jimmy said.

"You're a good boy, Jimmy, but your methods are naively direct." The Commissioner got up and began to pace, pulling at his beard. "Don't you realize that Calve will fight? And that with his men doped, he's got potentially the most ferocious army in history? He can order every last man to fight to the death—and every one of them will, no matter whether they want to. If only Walker had come back—no offense, Jimmy, you did a great job—but with what he knew of Calve's set-up, we could have worked out some way of pulling the Trojan Horse on them. Now—I don't know."

Jimmy said, "If I could get to Luris again—"

"What good would that do?"

"His only motive in playing along with Calve is to keep the serum from reaching the Earth. Maybe I could persuade him to stop making the stuff; or to make the next batch full strength without telling Calve."

"Why should he do that? Jimmy, the serum *didn't* get here; Vickers has it. We're searching for him, but it's a hopeless search. And it may be fifty, a hundred, two hundred years before he arrives—if he escaped that cloud of seetee in the first place. Obviously he didn't discover this space-

flying trick of yours. So Luris' position is the same as ever. Do you know the formula?"

"No. Walker knew it—"

The Commissioner spread his hands resignedly. "There; you see? Walker again."

Yes; Walker again. Yet Walker had to be written off; Vickers was now the important man. He had the serum. Walker was dead; or, if not dead, too seriously injured to be of any use even if he were found.

THE COMMISSIONER WAS looking closely at Jimmy. "You said Walker pre-viewed the destruction of your ship."

"Yes," Jimmy said disconsolately. "His brain was trying to repair itself. Somehow one of the unused areas must have been brought into play—a sort of prophetic sense. Otherwise he seemed to be unconscious."

"You have the serum in you now. Can't you try to locate Walker?"

Jimmy started. It might be done, at that. Yet—just how did you go about it? Walker himself hadn't willed to know; he had known by accident. Jimmy closed his eyes and tried to reach out for Vickers; then, for Elton and for Walker.

He opened his eyes again. "I don't get a thing," he said.

The Commissioner shrugged. "Too bad, Jimmy. I don't think we'll get the Council to sanction any mass attack, under the circumstances. Oh, there'll be a committee investigation, but you know that those seldom amount to anything. With the serum behind him, Calve will be able to deal with any committee well enough. If you think of anything else—"

Nothing else occurred to Jimmy. He left the office on his own two feet, too discouraged to use the evidently useless gifts Luris' serum had made available to him. It had all been for nothing. The best he could do with Luris' great discovery was to remind himself that he was due to go before the Board

of Review at the Academy next Sunday, and he'd need to get out his old uniform—

Wait a minute.

He hadn't been told that his case was to be reviewed; it wasn't even customary.

Pre-vision!

Where would the three pressure-suited men be *tomorrow*?

Jimmy closed his eyes. Suddenly he was Vickers, tumbling comfortably through space. In Vickers' mind a procession of dreams passed, murmuring to something that sounded suspiciously like movie-music. Vickers was content to drift until time ended or the Earth found him, dreaming of sentimental scenes that might have happened if he had had the courage to make them happen that way. His metabolism was enormously retarded, and his dreams were outright embarrassing. Jimmy stopped pre-viewing Vickers after he had gotten a good picture of how the stars looked from where Vickers was.

Suspiciously, Jimmy looked at his watch. It had taken him half an hour to get that brief flash of what Vickers would be dreaming about tomorrow. He'd have to be more careful.

"Move outa the doorway, bud."

Jimmy blinked at the guard and moved, planting himself finally behind a potted plant in the anteroom. There he reached out for Elton's tomorrow.

• ELTON WAS THERE.

He was dead. In his decaying mind, phantoms of memories moved and disintegrated. A few nerve-ends in his nostrils registered the odor of his own carrion body. A dying brain-cell said, "Jimmy, you hear me. Please—" and then blanked out. Luris' serum could do no more for Elton. His last appeal eddied away into despair and darkness.

Jimmy discovered he was crying. He was not ashamed. He looked hopelessly for whatever tomorrow Paul Walker might have—

A second later he found himself translated back into the Commissioner's office. "Walker—" he gasped. "He's—"

"Damn it, I asked you to stop that jumping around," the Commissioner growled. "Walker? You've got a line on him?"

"Yes," Jimmy said. "He's alive; his mind repaired itself. I can't seem to get to him clearly, but he's alive and I can see a little of what he will be seeing—"

"Will be—"

"Yes. He's on Ganymede. I could recognize some of the landmarks. But there's something wrong, something serious. Can't we get a ship—"

The Commissioner smiled on one side of his mouth. He said, "If we have to steal one."

• **WALKER WAS WAITING ON** the field when Jimmy, the Commissioner, and a squad of hand-picked Marines left the airlock of the ship. The field was lined with oddly silent spectators, but no one made any move to come forward. Walker was alone. He seemed taller, somehow.

As they walked hesitantly toward him, Jimmy realized why Walker was taller. His head, unbandaged now, was at least three inches longer than it had been before. On both sides, from his temples back to his ears, he had lost his hair; there was still a peak of it on top, reaching down to his enormously expanded forehead, but it only served to make him look as if he were wearing an inadequate cap. His neck-muscles had grown and

thickened to support the burden of that incredible head; and his eyes—*his eyes*—

Walker no longer had any eyes. Below the great forehead burned two lozenges of dull fire, like the flames that had consumed the ship in the cloud. Their even, featureless glow lit a face now as rigid and unchanging as marble.

"Jimmy Lane," Walker said.

"Yes," Jimmy said hesitantly. "How are you, Paul? I'm glad you're—"

"I am as I am," Walker said, his voice remote and terrible. He made no move either to leave the field or to walk toward them. On the edge of the field the crowd seemed to be holding its breath. "If you have come here to deal with Calve, he is dead. Some of his henchmen I have spared, to make the trip with me that I must make now that you have come; Luris is one."

"Wait a minute," the Commissioner protested. "If Luris is still alive, he has to come back and stand trial—"

The flaming things that had once been eyes swung on the Commissioner. He stopped as if paralyzed.

"I am not interested in your justice," Walker said. "Luris is now as I am. That is punishment, if punishment is what you seek. For the remainder—I need him. Therefore he will come with me."

"Paul," Jimmy said. "Please—what happened?"

"The inevitable, Jimmy Lane," Paul Walker said. "The second dose of serum given me before I was expelled from our ship was a massive overdose

"Life" says Science Fiction Writers show little Sense of Humor

We deny this, and if you don't believe science fiction can laugh at itself now and then, read GENE L. HENDERSON'S

A SECONDARY FIRST

in our forthcoming issue of *FUTURE*

—and my brain had been damaged. It rebuilt itself while I spun unknowing away from the sun. That part of it that men never use developed, furrowed, grew. Because the serum was in me, I found myself at last in complete control of the unknown four-fifths of the brain. But the known one-fifth *had been destroyed*, and when it was rebuilt, it was rebuilt—according to the dictates of the rest.”

● JIMMY LOOKED AT HIM. THE body was the body of a man, but Paul Walker was no longer human, nor even remotely like anything human beings might become.

“But you came here,” Jimmy whispered. “You completed your mission, Paul.”

“At a certain stage it seemed to me to be necessary that I come here,” Walker’s deep, strange voice said. “At that time I was still not fully conscious.”

He passed one hand across his temple in a slow, tranced gesture, as if smoothing back the lost hair. The movement was jarring; it belonged to a past from which Walker was now utterly cut off.

“The penalty,” Walker said. “The penalty of the serum. The slightest overdose excites the buried brain, and buries the forebrain; at the end, the cerebral cortex is burned out completely.”

“We’ll be careful,” Jimmy said. “But Paul—you’ve cleaned out this mess. You could come back with us, teach us—”

Paul Walker pointed at the silent crowd. There was a mad scramble to get out of the vicinity toward which he was pointing.

“Impossible,” Walker said. “I have liberated these people; you see the result. They are terrified of me. They have good reason. I am no longer of them, nor of you. I have other interests. There is a race not far from here, circling a red star—but you could not understand. Luris!”

There was a puff of disrupted air, and Luris stood beside Paul Walker, eyes burning, face frozen forever into the same inhuman mold.

“We are ready to leave. This little race no longer has need of us. Good-by, Jimmy Lane.”

Jimmy choked. “Paul!” he cried. “Paul! We loved you—we fired you from the wreck—do you owe us nothing?”

Walker bent the blank flames of his regard upon Jimmy Lane.

“Elton’s dead,” Jimmy said desperately. “But Vickers is still alive; so am I. Let us come with you. Vickers too.”

The Commissioner clutched at Jimmy’s elbow. Jimmy shook him off.

Walker passed his hand over his temple in that same dazed gesture. The thing that had been Luris said nothing, but looked upward at the cold stars. “This damnation,” Walker said, “would not be to Vickers’ taste; let him drift; it is best. Do you know what you ask for yourself, Jimmy Lane?”

“Yes. Give me the serum, Paul; the overdose.”

“Not necessary,” Walker said. “Wait—if this is to be done—”

There was a thickening of the air beside him, opposite the place where Luris’ lambent eye-sockets watched the stars. Then another pair of flames looked at Jimmy.

This had once been Elton.

“Would you have this man with us, that would be one of us, Jimmy Lane?”

“Yes—yes—”

“Let us go.”

Something struck Jimmy Lane a sickening mental blow. Unquestioningly, he died.

The creatures that had been Paul Walker and Jimmy Lane and Elton and Luris shook humanity from their shoulders and hurtled away into the cold, star-promised darkness.

●



The Troubadour

By Peter Michael
Sherman

There was something odd about
the guest attraction, Mr.

Fayliss, and something
odder still about
his songs.

SO FAR as parties go, Jocelyn's were no duller than any others.

I went to this one mainly to listen to Paul Kutrov and Frank Alva bait each other, which is usually more entertaining than most double features. Kutrov adheres to the "onward and upward" school of linear progress, while Alva is more or less of a Spenglerian. More when he goes along by himself; less when you try to pin him down to it. And since the subject of tonight's revelations would be the pre-Mohammed Arabian Culture, I'd find Alva inclined toward my side of the debate, which is strictly morphological and without any pious theories of "progress".

I'd completely forgotten that Jocelyn had mentioned something about having a special attraction: a "Mr. Fayliss", who, she insisted, was a troubadour. I didn't comment, not wanting to spend a day with Jocelyn on the phone, exploring the Provence.

The night wasn't too warm for August, and there were occasional gusts of air seeping through the layers of tobacco smoke that hovered over the assemblage. As usual, it was a heterogeneous crowd, which rapidly formed numerous islands of discourse. The trade winds carried salient gems of intelligence throughout the entire

archipelago at times, and Jocelyn walked upon the water, scurrying from one body to another, sopping up the overflow of "culture". She visited our atoll, where Kutrov's passionate exposition had already raised the mean temperature some degrees, but didn't stay long. Such debates didn't suggest any course of social or political action, and couldn't be trued in to any of her causes.

My attention was wandering from the Kutrov-Alva variations, for Bill had only been speaking for ten minutes, and could not be expected to arrive at any point whatsoever for at least another fifteen. From the east of us came apocalyptic figures of nuclear physics; from the west, I heard the strains of Mondrian interwoven with Picasso; south of us, a post mortem on the latest "betrayal" of this or that aspiration of "the people", and to the north, we heard the mysteries of atonality. It was while I was looking around, and letting these things roll over me, that I saw the stranger enter. Jocelyn immediately bounced up from a couch, leaving the crucial problem of atmosphere-poisoning via fission and/or fusion bombs suspended, and made effusive noises.

This, then, was the "troubadour"—Mr. Fayliss. The Main Attraction was

decidedly prepossessing. Tall, peculiarly graceful both in appearance and manner, dressed with an immaculateness that seemed excessive in this post-Bohemian circle. There was a decided musical quality to his speech, as he made polite comments upon being introduced to each of us, and an exactness in sentence-structure, word-choices and enunciation that bespoke the foreigner. Jocelyn took him around with the air of conducting a quick tour through a museum, then settled him momentarily with the music group, now in darkest Schoenberg, only partially illuminated by "Wozzek". I watched Fayliss long enough to solidify an impression that he was at ease here—but not merely in this particular discussion. It was a case of his being simply at ease, period.

Kutrov was watching him, too, and I saw now that there would be a most-likely permanent digression. Too bad—I'd had a feeling that when he came to his point, it would have been a strong one. "Hungarian, do you suppose?" he asked.

Alva examined the evidence. Fayliss had high cheek-bones, longish eyes, with large pupils. He was lean, without giving an impression of thinness. He had not taken off his gloves, and I wondered if he would come forth with a monocle; if he had, it would not have seemed an affectation.

"I wouldn't say Slavic," Alva said. He started off on ethnology, and we toured the Near East again. I jumped into the break when Kutrov was swallowing beer and Alva lighting a cigaret to observe that Fayliss reminded me of some Egyptian portraits—although I couldn't set the period. "If those eyes of his don't shine in the dark," I added, "they ought to."

A BRIEF pause for appreciation, then Jocelyn was calling for all men's attention. She managed to get it in reasonably short order, took a deep breath, then dived into announcing that our "special guest, Mr. Fayliss" was going to deliver a song-cycle.

Fayliss arose, bowed slightly, then nodded to Mark Loring, who brought forth his oboe. "These songs were not conceived or composed in the form I am presenting them," he said. "But I believe that the arrangement I use is an effective one.

"I call this, 'Song of the Last Men'." He nodded again to Loring, and the performance began. His voice was affecting, and his artistry unmistakable. And there were overtones in his voice that gave an added eeriness to the weird music itself.

The songs told of the feelings, the memories, and despair of a nearly-extinct people—one which had achieved a great culture and a world-wide civilization. The singer knows that the civilization has been destroyed; that the people created by this culture and civilization are gone, the few survivors being pitiful fellaheen, unable to rebuild or bring forth a culture of their own. There is despair at the loss of the comforts the civilization they knew brought them, sorrow at their inability to share in its greatness—even in memory; and a resigned certainty that they are the last of the race—they will soon be gone, and no others shall arise after them.

There was silence when Fayliss finished, then discreet but firm applause, as if the audience felt that giving full reign to their approval would make an impious racket. Fayliss seemed to sense this feeling, and smiled as he bowed.

"These are not songs of your people, are they?" asked Jocelyn.

Fayliss shook his head. "Oh no—they are far removed from us. I am merely an explorer of past cultures and civilizations, and I enjoy adapting such masterpieces of the past as I can find. This arrangement was made for you; I shall make a different one for my own people, so that the sonic values of the music and the words agree with each other."

Kutrov blinked, then asked him—"Well, can you tell us something more about the people who created this cy-

cle? It has a familiar ring to it, yet I cannot tie it in with any past culture I have heard of."

Jocelyn cut in with the regretful announcement that Mr. Fayliss had another appointment, and called for a note of thanks to him for coming. More applause—this time unrestrained. Fayliss smiled again and swept his eyes around us, as if filled with some amusing secret. Then he said to Kutrov, "You would find them quite understandable."

I wandered over to the window, in search of air, and noted that someone had indiscreetly left a comfortable chair vacant. I was near the door, so that I could hear Jocelyn say to Fayliss: "It was—very moving. Why, I could almost feel that you were singing about us."

Fayliss smiled again. "That is as it should be."

"Of course," chimed in Loring, who'd come up to ask Fayliss if he could have a copy of the score, "that's the test of expert performance."

The lights were dimmed again by the fog of tobacco smoke, and I could see the street quite clearly by moonlight. I decided I would watch Fayliss, and see if his eyes did glow in the dark. I saw him go down the sidewalk, with that graceful stride of his, his hands in his pockets. But I couldn't see his eyes at all.

Then a gust of wind tugged his hat, and, for an instant I thought he'd have to go scrambling after it. But, quick as a rapier thrust, a tail darted out from beneath his dress coat, caught the hat, and set it back upon his head.

TODAY AND TOMORROW

IN THE March, 1951 issue of *Other Words*, editor Ray Palmer ascribes most, if not all, of our present-day difficulties to the "fact" that "...we can't come out and talk! Because we can't think of anything to say!" Since these statements appear in a context of general censure of another science-fiction editor's decision not to use editorials, let's allow a good bit of leeway for over-emphasis, rather than decide that Palmer's proposed solution for all the world's difficulties lies in "talking things over."

And let's look into the general point, which seems—unless I have grossly misread Mr. Palmer's article—to be that we need discussion of the problems that surround us, and "talking them over" may lead to something worth getting to.

First of all, I'd advise anyone who imagines that talking, alone, can solve any problem, start reading collections of great debates, the Congressional Record, etc., then follow these up with historical research into the events that followed the debates. This should convince you of two things: (1) just "talking things over" in itself achieves very little (2) the kind of "talking" that precedes decision and/or action has a lot to do with the relevancy of the action taken to the situation the action is supposed to deal with. (3) a depression amount of "talk" turns out to be pretty meaningless so far as any relation to the world, and to specific situations in it, as it actually exists outside of the skins of those who are talking. (4) too often, we "talk ourselves" into irrelevant, irrational, and self-defeating attitudes and behaviour.

In other words, *meaningless talk*—speechifying that bears no verifiable and/or relevant relation to actual events in the outside world (as differentiated from things going on inside the nervous system of the people talking)—not only solves no problems, but aggravates problems that do exist, and, at the same time, creates fictitious and delusive problems.

Investigations into the functions of language—that is, the study of relationships between symbols and "reality", between "talk" and attitudes and action, between words and the consequences of their use—start with the question: "What kinds of meaning can language convey?"

Roughly, you can break it down into four basic categories—although this does not mean that any given statement will consist wholly of any one of these elements.

First, we have the *informative* function: an example of this kind of statement, by itself, would be: "The new issue of *Future* is now on sale." You can check on the accuracy of this statement by looking *beyond the words and at the facts*. You scout around the newsstands to see if a "new issue" is there.

Second, we have language that is used to set up language—that is the *systemic* use of language. Before you can meaningfully say, "The new issue of *Future* is now on sale", we have to have arrived to some agreement as to what is meant by "new issue", "*Future*" and being "on sale". In other words, systemic language tells you about our linguistic systems, so that information can be communicated; language, we see, consists not only of

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The So - Called Fourth Dimension

By L. Sprague de Camp

You've read "time-travel" stories, and "fourth-dimension" tales, no doubt. Here's an article on what data we really have on the subjects.

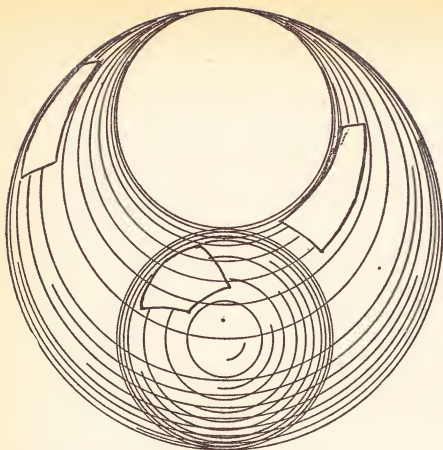
PEOPLE WHO believe in the reality of prophecy sometimes explain it on the theory that "Time" is the Fourth Dimension and can therefore be seen or moved along as if it were a length. For almost a century this Fourth Dimension has been a favorite foible among the pseudo-scientific. Every now and again you hear that it's "Time," that it's perpendicular to the three dimensions of space, or that it is so mysterious that only the leading mathematicians of the world understand it.

None of these things, however, is true. First of all, there is no such thing as *The Fourth Dimension*, at least in science. The difficulty lies in the fact that laymen and men of mathematics mean different things by the word "dimension". A layman thinks of a *spatial* dimension, that is, length, breadth, or height. A mathematician, on the other hand, uses the term to mean *any measurable attribute*, such as age, density, wealth, or number of wives.

The idea of considering "time" as a (not *the*) fourth dimension was proposed by the French mathematicians Lagrange and d'Alembert in the Eighteenth Century. These savants suggested that certain problems in analytical mechanics—as sober and dull a science as you can find—would be simplified by considering bodies as moving in a manifold, or working combination, of four dimensions, of

which three were spatial dimensions and the remaining one "time." It makes no difference whether you take your "time" as the first or the fourth dimension, so long as you do not change the order in the middle of the problem. You describe an airplane's position in four dimensions when you say it's 5,000 feet north of the control tower, 1,000 feet east, and 500 feet up, at 12:46 p.m. If you want to include the volume of fuel in the tank as the fifth dimension, that's perfectly all right too. About the fourth dimension, as you see, there's really *no* mystery at all. No competent mathematician—including Professor Einstein—ever advanced the claim that "Time" was *The Fourth Dimension*, or that it was a spatial dimension perpendicular to the other three. If you think that you can erect four spatial dimensions, all at right angles to one another, try it with four pipe-cleaners. As for the non-Euclidian geometry of Lobachevski and Riemann, and Professor Einstein's curvature of space, those are quite separate problems, despite the fact that they are sometimes confused with the idea of four or more dimensions.

Pseudo-scientific Fourth Dimensionalism—something quite different from analytical mechanics—started in the last century. One of its early leaders, the astronomer Prof. Johann F. C. Zollner of Leipzig, confused the



Tesseract, or four-dimensional object, according to the vision of the orientalist and occultist, Van Manen.

fourth dimension of analytical mechanics with the Kabbalistic and Theosophical idea of a multitude of planes of existence, all occupying the same space but not interfering with one another. Zollner, beginning to show signs of a mental breakdown, undertook to prove the reality of his "Fourth Dimension" with the help of "Dr." Henry Slade, an American medium whose stable of spirits loved to write upon slates. The astronomer coaxed three of his colleagues to join him in the tests. Of these, two suffered from defective vision (one poor man being nearly blind); the remaining professor was seventy-four, and, you may guess, not so observant as once he had been. About professional

conjuring none of them knew a thing.

At the first seance, in '77, Slade tied knots in a cord, both ends of which were, according to Zollner, secured the entire time. He also, it's said, took coins from cardboard boxes without, as most men must, opening the boxes first. The crucial experiment was to have been the linking together of two wooden rings—solid rings—which, thought Zollner, would prove the power of mediums to enable matter to interpenetrate by rotating it through the "Fourth Dimension." (If you don't know what that means, I don't either.) But all Slade did was to string the rings on the leg of a little table. Other tests proposed, such as reversing the twist

of a snail-shell, Slade declined or evaded.

Nevertheless poor Zollner thought that he had his proof, and wrote it up as *Transcendental Physics*. Then he went mad and had to be confined. Subsequently the Seybert Commission of the University of Pennsylvania exposed Slade's slate-writing tricks as ordinary sleight-of-hand; in 1882, Slade fully confessed to these impostures.

THE NEXT GREAT LEADER

of pseudo-scientific "Fourth Dimensionalism," the English-born inventor, and teacher of mathematics, Charles Howard Hinton by name (1853-1907) wrote books on the notion of four spatial dimensions and ended his days as a U. S. Patent Office examiner. Hinton, hardly a scientist in any strict sense, confessed that at Oxford he'd found the sciences very difficult, and that the real purpose of his "Fourth Dimensionalism" was to provide a basis for faith and morality.

Hinton's arguments were analogical, not scientific. He claimed that a two-dimensional creature, perfectly flat with no thickness whatever, would be confined to a surface and therefore could not know the third dimension which to us is obvious. A line on this surface would be a barrier as insurmountable to the "Flatlanders" (as he called them), as would be a wall of infinite height to us. Our ability to cross this line would impress the two-dimensional beings as a supernatural feat. Therefore there must be a "fourth dimension" of which we, limited to three dimensions, are unaware, and a fourth-dimensional being would seem supernatural to us.

Hinton filled his books with diagrams to teach people to think four-dimensionally, and invented a class of four-dimensional solids called "tessaracts", to which he gave such impressive names as "hyperspheres" and "pentahedroids". He even wrote a novel, *An Episode in Flatland*, about a race of two-dimensional ani-

mated triangles who lived on a disk-shaped planet—though Lord Dunsany made more entertaining use of a similar idea in *The Charwoman's Shadow*. Hinton's works are moderately entertaining as fantasy; the trouble arises when people insist upon taking them seriously. Actually no-one has ever seen a two-dimensional object, or erected four perpendiculars about a single point. The nearest anybody has come to modelling a tesseract was the vision of a hypersphere which the orientalist Van Manen said that he saw while lying in bed. The figure, an ordinary sphere whence two curved and tapering horns projected, meeting at their tips, comprised a shape between a doughnut and a crescent. (See the cut.) The figure is of course not itself Four-Dimensional, but is supposed in some occult way to convey the impression of Fourth-Dimensionality.

A select band of pseudo-scientists long continued to exploit the "Fourth Dimension"—in the Zollner-Hinton, not the scientific, sense. Perhaps the most aggressive of this fraternity was the emigre Russian occultist P. D. Ouspensky, who until his death a few years ago held forth to his little circle of seekers in rural New Jersey. Ouspensky's *Tertium Organum* was intended to finish the series of logical treatises begun by Aristotle's *Organon* and continued by Francis Bacon's *Novum Organum*, to revolutionize the outlook of mankind, and to guide our thinking forever more. I doubt, however, whether any of these ambitious goals will be realized.

In the *Tertium Organum* and its companion, *A New Model of the Universe*, the author advances arguments based upon Theosophical occultism and Hintonian pseudo-science, and gives vent to his many dislikes, including democracy, coeducation, Darwinism, Positivism, the Metric System, social reform, and phonetic spelling. He gives a much muddled explanation of how motion in the "Fourth Dimension" has to do with molecules and

atoms, and is exemplified by snowflakes, thermal expansion, and the growth of organisms, despite the "erroneous ideas" of modern scientists on these subjects. This dimension is also "Time"; but since "Time" is really a spiral (by which I think he means a helix) it must have three dimensions of its own, so that six dimensions in all exist. Ouspensky believes in reincarnation, but in a most peculiar sense: when you die you go back to the beginning and thus lead the same life over and over. His erudition does not prevent his filling his book with wild misstatements like: *"Present-day science takes the Sphinx to be prehistoric."*

THE BRITISH ARMY OFFICER

John W. Dunne, another "Fourth Dimensionalist," was also an airplane pioneer and the author of some excellent children's fairy-tales. Between 1905 and 1913 Colonel (then Lieutenant) Dunne built several of the first British airplanes, tailless machines with sharply swept-back wings. Although they are said to have flown quite well, their creator soon retired from aeronautical work. In 1927 he published *An Experiment with Time*, which advanced the theory of "Serialism". He erected this hypothesis upon the rather shaky basis of prophetic dreams, some of which he said he recorded before the things that he dreamt of happened. In one case, for instance, he had the dream of being chased by an angry horse; next day, sure enough, he was chased by an angry horse.

Dunne undertook to explain prophetic dreams by asserting that we "move" along the "Fourth Dimension of Time"—another argument by analogy, since "move", in the literal sense, refers to spatial motion only, whatever it is that we do in "time". The dreams are supposed to be sent to us by a higher-order "observer", of which we are a part, and, since it takes time to travel in "Time", there must

be a still higher-order—a Fifth-Dimensional—"Time", in which lives an observer of still higher order, and so on.

Dunne's arguments by far-fetched analogies are but an up-to-date version of the old notion of the philosopher Parmenides that all events, past, present, and future, coexist in an "eternal now", and that a prophet can "see" past and future events by his extra-sensory faculties, as though they were in the "present". This idea, however, has strong logical objections, one being that if you can "see" a future event, you ought to be able to take some action to prevent this event from occurring; and if you do that, the event didn't exist in the future to be foreseen in the first place. Moreover Dunne's prophetic dreams are by no means established as facts. An effort by the British Society for Psychological Research to reproduce them in 1932, using forty-two subjects, failed.

If despite all reasons to the contrary, you assume that "time" is a kind of spatial dimension, and that you can "move" along it, why can't you travel in "time"? This is of course the familiar "time-travel" plot of the science-fiction story.

A DIFFERENCE, HOWEVER, exists between "time-travel" backwards (to an earlier date) and forwards. "Time-travel" forwards may be considered a development of the old Rip Van Winkle story-plot, which goes back to a tale that was told of the Greek philosopher Epimenides and probably earlier. It presents no insurmountable logical difficulties, because you can easily imagine a person somehow anesthetized or disintegrated for the needful interval and then revived. Benjamin Franklin expressed the wish that he could be pickled in wine for a century, then awakened to see what had happened while he slumbered.

Backwards "time-travel," on the other hand, involves worse paradox-

es than those of prophecy. These may be summarized by the question: "What would happen if you went back for fifty years and slew your own father before he begat you?" To put the objections more exactly, such "time-travel" would mean violating Aristotle's third law of logic—that, of two contraries, both cannot be "true" at once. Not even such daring modern logicians as Korzybski and Brouwer have found themselves able to dispense with this principle, though they have developed self-consistent systems of logic without the other laws of Aristotle.

Suppose, for instance, that I travel backwards in "time" just one day. Then, at noon, I enter the room wherein I was writing this piece, and slap myself on the back. But I know perfectly well that yesterday noon *no de Camp* double came in and slapped me upon the back. Therefore this slapping would have to be both "true" and "false" at once.

The "time-travel" plot appeared first (as far as I know) in Dickens' *Christmas Carol*, and then in many stories published in the 1880's and 90's including Mark Twain's *Connecticut Yankee* and Wells' *Time Machine*. Since then writers have published hundreds of such stories and have imagined scores of devices for "moving" the traveller and for glossing over the paradoxes of "time-travel." In one story the party went to the North Pole and flew round and round it withershins, losing a day with each circuit. Arrived in the past the voyagers may or may not change future history. Maybe an opportune accident stops them from doing so; sometimes they change it but are destroyed in the process; sometimes they start a new alternative branch of history that coexists with the old.

The logical hazards of backwards "time-travel" deter all but a few folk from taking it seriously. However the celebrated "Versailles Visions" of Anne Moberly and Eleanor Jourdain have actually been presented as a

journey into the past. These two intellectual English spinsters claimed that in 1901 they visited the Petit Trianon at Versailles, France, and there stepped back into the 18th century, complete with Marie Antoinette. They passed gardeners and other employees, one of whom gave them directions. They saw an evil-looking pock-marked man in a cloak, and later passed an oddly-dressed woman sketching. The whole time they were oppressed by a feeling of strangeness and noted the singular solitude and quiet of the grounds, and then—they stepped back into the 20th century again.

Later they compared their recollections and, becoming infatuated with the idea of a visit to an older and supposedly more glamorous day, embarked upon a lengthy investigation of the condition of the gardens in former times. From various clues they picked August 5, 1789, as the date to which they had gone back. They also believed they had identified all the people they had seen: the sketching woman as Marie Antoinette, the pocked man as her sinister friend the Comte de Vaudreuil, and so on. Their story was published as the book *An Adventure*, first pseudonymously and later under their own names, and has been re-told several times in magazine articles.

BUT DURING THE 1930's R. J. Sturge-Whiting, an Englishman interested in psychic research, reviewed the whole case, went over the Petit Trianon grounds, and learned that the Misses Jourdain and Moberly had been the victims of a vast self-deceit. Having fallen in love with a transcendental explanation of their adventure, they had gone to enormous trouble to hunt up facts that seemed to bolster this interpretation, whereas a fraction of the effort spent upon finding rational reasons for those events would have quickly exploded the theory. There were numerous holes

in their story: for instance, inconsistencies between the statements of the two women, and between their original notes and the published account.

Sturge-Whiting disposed of their other points just as ruthlessly: the various scenic features that they said no longer existed, he found still extant. Thus the "kiosk", a small ornamental marble structure they had made much of, he showed to be but a confused recollection of the Belvedere and the Temple d'Amour, the latter mis-remembered as occupying the site of the former. And the people seen were ordinary 20th-century workers and visitors.

Evidently Omar was right when he said:

*The Moving Ringer writes; and,
having writ,
Moves on: nor all your Piety
nor Wit
Shall lure it back to cancel half a
Line,
Nor all your Tears wash out a
Word of it:*

Perhaps that is just as well. No doubt we should all like a chance to perform some former action over again and differently. But, as if there weren't enough things (including the Big Bang) to worry about, think what it would be like if somebody in *our* future were likely at any time to go back into *our* past, alter history, and, in the process, snuff us out like candles!

FROM THE BOOKSHELF

Publishers are requested not to send fantasy selections to this department, as the volume of science-fiction books fully occupies the reviewer's time and space.

ROBERT A. HEINLEIN is the author who is regarded as having set in motion a new trend in magazine science-fiction writing, and I think the regard is justified. Consider the most prevalent characteristics of the general approach to writing, characterization, etc., in the early Gernsback days—excluding the Wells, Verne, and other "classic" reprints: the main emphasis was on science, and the scientific theory behind the departure from the "known". There was not too much emphasis on "story", as such—plots were usually very simple, and not particularly exciting, or even interesting, in themselves. Characters were little more than names; many stories were little more than "histories" of this or that succession of "amazing" events. In the relatively few instances where you found better "story", and better writing, the "science" was less in evidence. (Another exception might be found in the many "scientific detective" stories in the original *Amazing Stories*; these were more interesting "stories" but the writing and characterization were seldom noteworthy.)

Then came the original *Astounding Stories of Super Science*, wherein the now-established "science fiction" story was adapted to the general "pulp" formula. This approach certainly resulted in more readable and more interesting fiction; it also injected many of the less-desirable "pulp" characteristics of the time. Plots, situations, etc., became standardized; "science" was reduced to a few elements which were repeated month after month. Most

writers were content to use a handful of "super-science" formulations with which the science-fiction audience was already familiar. The result was that, now and then, one read a whoppingly good adventure story, but most of the material was run-of-the-mill—for the most part competent workmanship along the lines set down.

This reacted upon the older publications to the extent that the editors of *Amazing* and *Wonder* became more "story" conscious and these two magazines (there were only the three at the time—not including the quarterlies) began to come forth with a generally more satisfactory level of fiction. With all its limitations, the "pulp" field did contain various levels of presentation, and while the two older publications aimed at the higher boundaries—that is, the more literate levels—the original *Astounding* generally aimed for the lowest common denominator. "Characterization", however, was mostly stereotype. (The trouble with stereotypes is that they operate as substitutes for observation.)

When *Astounding* changed ownership, Orlin Tremaine attempted to push the level higher, aiming at the more literate standards in pulp fiction of the time, calling for both "human interest" and "super-science"; "idea" alone wasn't enough, a first-class "story" was wanted. And, as the number of reprints from that era of *Astounding* in the top-rate anthologies show, the experiment brought forth a num-

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Mask of Peace

By Edwin James

A dream would be betrayed, but Carla knew that this was better than permitting the dream to fulfill itself into nightmare reality!

"Peace seemed an impossible unreality in the turbulent ninth century of the post-Imperial era; the galaxy was broken into a hundred warring segments under greedy, ambitious tyrants, until the revitalized League of Peace, under the magnetic leadership of Eldred Carla, promised to bring the three major rulers into an agreement to maintain present boundaries and prevent further warfare by force of arms..." Milton George, *Galactic History*, v. 6, p. 297.

WITH ONE last fiery sigh, the space ship settled to the surface of the small space port. The port was not particularly busy at that time of evening, but the ship was only a two-seater, dark and insignificant; nobody paid much attention to it, or to the pilot who made his way into the port waiting room. He was clad in a long dark cape and a dark hat which shadowed his face. The pilot paid his bill in advance and started toward the door into the street.

"Mr. Carla!"

The pilot's step hesitated, and his lean dark face slowly turned to fix the doorman on the gaze of two intense black eyes.

"We hadn't heard you were on Flora, sir. I mean, I didn't know that you..."

"No?" The pilot's face was non-committal.

"Peace go with you, Mr. Carla," the doorman said fervently, making a

There's a difference between "peace" and "peace at any price"; graves are "peaceful", too!

small gesture with his fingers. "We all know what you're trying to do; we're all praying for you."

Carla repeated the gesture, and a slow smile exposed two even rows of white teeth. "Peace go with you, friend. What is your name?"

A fleeting expression across the doorman's face was hidden by the shadows. "Davis, sir. Robert Davis."

"You haven't been attending the meetings regularly, have you, Davis?"

"No, sir," the doorman said hastily. "My wife has been ill. There has been no one to stay with her. Otherwise..."

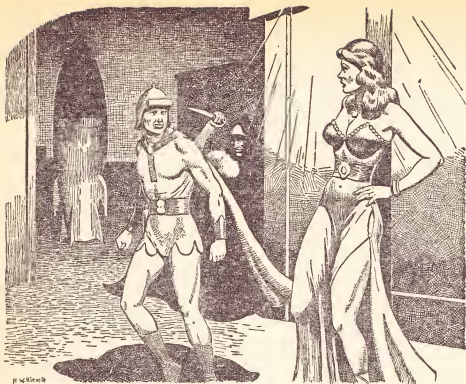
"Peace, Davis; such things cannot be helped. But the League needs faithful members. See that you return to full participation as soon as possible. Meanwhile, remember that my visit here is secret; I rely upon your secrecy."

"You can, Mr. Carla."

"Peace go with you, Davis." Carla turned and strode away down the dark, silent street.

Flora, Carla mused, the minor planet of an insignificant sun, few exports, little natural wealth, small tactical position lying near the outskirts of the galaxy.

"Flower planet," he chuckled, eyeing the dingy shabbiness of the warehouse district, for Carla prided him-



Carla sensed, rather than saw, the knife behind him...

self on his knowledge of etymology and tried to keep abreast of the latest cultural discoveries or deductions from the tumbled ruins of the mother planet.

No temptation to conquest here, he thought, but a place where history might be shaped—secretly. The thought was amusing. Little, independent Flora, the birthplace of history! The thought that he might assist at the birth was even more amusing. Poor Flora was pregnant and didn't suspect anything. Or, on the other hand, maybe it was a false alarm; there had been several such lately.

A familiar prickling of the scalp warned him. A quick, twisting turn saved him from serious injury as a knife blade whispered through the cloth of his cape, part of his upper arm, and out through the cape again. That arm, wounded though it was, made a smooth, swift motion to his hip as a brawny, cloth-covered arm came around his throat. His arm con-

tinued its arc, and Carla heard a pained grunt as his own knife blade plunged into a soft belly.

•THE ARM RELAXED AND

Carla's leg followed the twisting of his body to land in the groin of the knife wielder who had struck the first blow. The man doubled up and slowly knelt down on the pavement, groaning. Now Carla's left hand was filled and as a third assailant closed in, a low cough came from the pellet gun in his hand. A scuffling sound came from farther down the street. Carla turned to see one of the crew running, bent over, both hands clutched to his belly. He chanced a shot, but the range was too great and the pellet made a small flare against the side of a building and fell smoking to the walk.

Carla turned to survey the field. The one who had taken the pellet was dying, his limbs jerking in agony. The first was slowly, painfully trying to

crawl away. Carla caught him up by the collar, thrusting him against the smoky side of a warehouse. "Who sent you?"

The man shook his head weakly. Carla slapped him across the face, hard. "Who sent you?" he repeated savagely. "Who paid you? Who pointed me out?"

"Nobody," the man got out. "Nobody. I don't know what you're talking about."

"You're lying!"

"Naw," the man said hysterically. "We're just a gang; just the three of us. Thought you looked easy. Thought you might have money."

"Know what this is?" Carla showed him the gun.

The man's eyes widened. "Yeah. A pellet gun. Yuh got Jackie with it. Yuh ain't gonna shoot me, Mister! I'm tellin' yuh straight."

"Who sent you?" Carla raised the gun slowly.

"Nobody, I'm tellin' yuh," the man screamed. "Whadda yuh want me to say? I'll say anything yuh want. Gimme the knife if yuh want to, but don't put a pellet in me! The Assassins! That's what. The Assassins sent me."

"You're lying!"

"I told yuh, mister. I'll say anything yuh want; who do yuh want me to say?"

Carla slowly shook his head. He didn't have the time to waste. He reached inside his cape and drew out a small needle. As the man tried to scuttle away, Carla scratched his hand lightly. In a few feet the fellow collapsed. That should keep him quiet for long enough.

Hastily Carla stripped his arm. It was only a flesh wound, but the knife might have been poisoned. He uncorked a small vial and poured a few drops into the wound and a few more onto his tongue. He wrapped up the wound, brushing the tears from his eyes, and resumed his coat and cape. He turned slowly to find two beady eyes gazing at him from the

gnarled, wrinkled face of an old crone.

"He he he," she cackled. "You killed this man and that man," she pointed. "But you missed the fat one; he ran away."

"Who cares?" Carla's voice was low and casual.

"Not me," she giggled. "But the men who clean up the streets won't like it; it's such a bother for them. They're always complaining about it."

"I'm glad you were amused."

"More fun than I've had in ages, sonny," she said. "Very neat, too, I will say, who have seen my share."

"I'm glad," Carla said, as he walked away toward the distant lights of the business section.

"But, mister," the old woman called after him, "you shouldn't have let the fat one get away!"

•THE LIGHTS OF THE business district were blinding after the darkness of the deserted factory and warehouse area; every building was a fountain of vari-colored lights, inviting, soliciting, compelling. Soothing melodies and rhythmic dissonances wavered through the air in ear-tling intensity. Perfume and stench assailed the nostrils. It was that cosmopolitan mingling of the highest and lowest elements of life which was the criterion of the era.

Carla brushed shoulders in the crowded streets with gorgeous dandies with their curled plumes and hair, their glittering clothes and adornments, their mincing steps. Then even more brilliant female counterparts were dressed over-abundantly in places—in others exposed beyond the call of even a lascivious fashion, laughing coyly, talking boldly, glancing wantonly. There tough, battle-hardened, scarred professional soldiers, armed, belligerent, pleasure-seeking, free-handed and suspicious, ready for any encounter, male or female, brushing the expostulating dandies from their paths, taking their not-unwilling feminine companions with a flourish. And beggars, ragged, snarling, whining bundles of superan-

nuated humanity, limping, creeping, crawling. They all gave way for the silent, dark-robed Carla, leaving a swirling, uncertain, quieted whirlpool behind.

The huge, three-dimensional viewer loomed ahead atop a low, dark, flat-topped building. The crystal walls now enclosed a brilliant symphony of swirling light, casting weird colors on the faces and figures of the passing throng, transforming them into unreal shadows of an unwordly reality. The masses passed unmoved, but Carla paused and leaned back against a scarlet wall.

The symphony of color faded, to be replaced by large block letters:

WAR

Other letters formed below:

THE ARCTUREAN FLEETS HAVE BEEN BEATEN BACK IN THEIR ASSAULT ON THE OUTER FORTRESSES OF SIRIUS IN AN INCONCLUSIVE BATTLE WHICH SAW LITTLE DAMAGE DONE ON EITHER SIDE.

ON THE OTHER SIDE OF THE GALAXY UNEASY PEACE RULES AS A RESULT OF THE STALEMATE WHICH OCCURRED WHEN THE TWO LARGEST FLEETS ANNIHILATED EACH OTHER IN THE MOST INTERESTING SERIES OF MANEUVERS SINCE THE FINAL DEFEAT OF THE BARBARIAN HORDES, LEAVING THE TWO PRINCIPAL RULERS WITHOUT MEANS OF ATTACK. ANALYSTS EXPECT NEIGHBORING SYSTEMS TO TAKE ADVANTAGE OF THE SITUATION WITHIN THE NEXT SEVENTY-TWO HOURS.

The letters faded into two battle scenes in vivid three-dimensional reality, one showing the attack on the fortresses of Sirius, and the other the

maneuvering and complete destruction of two fleets.

Again the letters formed:

PEACE

This was followed by:

RUMORS ARE STILL FLYING WILDLY ABOUT A POSSIBLE MEETING BETWEEN SEVERAL OF THE PRINCIPAL RULERS IN THE GALAXY AND ELDRED CARLA, HEAD OF THE LEAGUE OF PEACE, TO ESTABLISH AN INVINCIBLE ALLIANCE FOR THE PREVENTION OF WAR. REPORTS VARY AS TO THE TIME AND PLACE OF THE MEETING AND EVEN THE NUMBER AND PERSONAGES OF THE HEADS OF STATE. ONE OF THEM CERTAINLY WILL BE THE RULER OF THE SIRIAN EMPIRE, GORDON III. NONE OF THESE RUMORS HAS BEEN VERIFIED, AND THEY MAY BE MERELY A SMOKE SCREEN FOR OTHER ACTIVITIES IN ANY CASE THE ATTITUDE OF THE GALAXY'S CITIZENS, OTHER THAN THE MEMBERS OF THE LEAGUE, CAN BEST BE EXPRESSED, PROBABLY, IN THE WORDS OF THAT ANCIENT MASTER OF SWORD AND PEN, VINCE. CARLA'S WAR—PEACE; WHAT DOES IT MATTER? IN WAR WE ARE KILLED BY OUR ENEMIES, IN PEACE BY OUR FRIENDS."

The crystal cube was filled by the smiling head and face labeled beneath: *Eldred Carla*.

Carla hastily pulled his hat a little lower over his face and turned quickly away. A few blocks down the street his pace slowed. A small bar invited him, and he was soon seated at a table sipping a tall, cool drink.

Perhaps Grayson was right, he thought. But he shook his head slowly. It had all been gone over before, time and time again; this was the only way, the only right way. Everything—the analysts, the historiographs, the seers—bore it out. Nothing could be allowed to interfere with the destined path of history. Carla's lips tightened. And yet there were—psychological obstacles.

He shook his head. There were times for mercy and times for ruthlessness; times for indulgence of feelings of humanity and times for unswerving action. Carla knew which time this was, distasteful though the knowledge was at moments.

• **A CONVERSATION CLOSE** behind him caught his attention and a fleeting smile crossed his lips. A tale of conquests, when conquests were easy: of women when morals were loose; of men and worlds when the strong could overcome the weak with little danger and the clever could trick the foolish and trusting without compunction, openly, and be admired for it.

Carla could identify the possessor of the voice without turning. It would be a big fellow, slightly gone to fat, vicious to the weak, cringing to the strong, a hero in the recounting, a coward in action. He would not last long with his big, loose mouth. But the conversation had turned to other things.

"Now peace—that's a thought."

There was a sly voice. "A thought for weaklings; a thought for fools."

That was the braggart.

"You are not subtle, my friend," said the wily one. "You do not see what peace can be in the hands of those who know how to wield it. Peace is often a stronger weapon than war."

"What do you mean?"

"War is a waste, and when the waste is carried on too long the people become restless. Resources are depleted; trade is halted. The little and the big have been fighting off and on for

over a century. Perhaps it is time to consolidate, to protect for the moment, to give the people the illusion of prosperity."

"The people are well off—what have they to complain of? It is we who do the fighting, the professional soldiers."

"But it is the people who pay for your indifferent efforts—after all, what is it to you who wins? You are paid by the day, not the job. First you fight for one side, then the other. And you take good care not to risk your good hides overly."

The man growled.

"Save that for the little ones." The voice was steely.

The big mouthed one subsided.

"And then when, by good fortune, you break through to a planet—then the pillage and the looting, then the burning and killing, then the rape, eh?"

The braggart chuckled. It was an unpleasant sound.

"The people have no reason to love you or your kind—or their rulers, either, if they only knew it."

"Peace—I repeat—there's a thought!"

Carla's brow clouded. There was more than half a truth in what the sly one said.

The big one was speaking again, this time in a confidential whisper. "You think me stupid, perhaps. But there you are mistaken. I imagine I know more of this matter than you suppose." He stopped to let the remark sink in.

"Indeed?" The other's tone was skeptical.

"This peace you were speaking of," the big one hurried on, "what if I should tell you that I am on the inside of that."

"I should tell you that you are a fool."

"Then look! Look!"

"What are you trying to tell me. That you are a member of the League? Ha! The card says so. I knew that, you fool."

•THE UPROAR WAS AT THE door, a door suddenly blocked by uniformed police, guns in their hands. "This place is surrounded," said the leader of the group. "We have reason to believe that there is an enemy of the state in this room. You will file out quietly, one by one, showing your identification."

"The card. Give me the card!" The braggart's voice was harsh and low.

"Card? What card?" The other's voice was surprised.

"The card I gave you. The League card!" The big one was getting hysterical as the search narrowed.

"I don't know what you're talking about."

Carla felt something thrust into his hand. He turned slowly around to see the loud mouthed one, much as he expected, surrounded by police.

"He took my card!" He took my card! the fellow screamed.

The other shook his head at the police, spreading his palms in innocent bewilderment.

"Come along," said one of the officers.

"Thanks," said Carla in a low voice as they passed the thin wiry man he identified as the one with the sly voice.

"It's all in the interest of peace," the thin one said, in a voice that could mean anything.

Carla tensed as he neared the inspection line. The officer glanced at the card and back to Carla's face. His eyes narrowed suspiciously. "Is this your card?"

Carla made a gesture with the fingers of his left hand. "Of course not," he said, smiling; "I got it off the big fellow."

The officer laughed and returned the gesture. "Peace be with you, friend."

Outside Carla breathed deeply of the cool night air before he moved down the street toward the slums.

•THIS WAS THE OTHER SIDE the coin, Clara thought. No dandies here; no sparkling towers of

light; no melodies; no mingled odors—only the all-pervading odor of poverty, strong in the nostrils, overpowering in the mind. Everything was dirt and disrepair, shabby ghosts of buildings inhabited by shabby ghosts of humanity. This was the slums.

Carla knew what it was like to wake up hungry in the morning; to go to bed hungry at night; hunger all the day for food to feed the starving body, the starving mind, the starving soul. Carla knew what it was to glimpse the lights from afar; to shiver ecstatically in a dark corner at the sight of comfort, of luxury, of beauty. Carla knew what it was to fight, desperately, ceaselessly, agonizingly, for just one thing—escape, to get out, to leave the dirt and depression and hunger and despair behind. Carla knew what it was. This looked enough like his home to be his own. These streets might have been his tutors. These faces might have been his.

Once Carla had thought he hated them. Once, had he had the power, he would have wiped them away, destroyed their dreary homes and their dreary lives together. Later he had pitied them. Now he knew that here was the hope of the future, the best of the galaxy, in spite of all appearances. From these slums sprang the great men, the fighters, the artists, the idealists, the dreamers, the hoppers; elsewhere the galaxy was dead of its own boredom, dead of its own soul-sickness. Here there was no time for boredom, no time to be soul-sick; here there was only the eternal fight.

Carla ached to be among them, doing his work, preparing the fertile ground—the stinking breeding place of everything foul that had only to be tended, cultured, to raise great crops of the brightest blossoms the galaxy had ever seen.

Carla steadied his thoughts, straightened his steps. First there was work to do.

"Any old coins, mister?"

"Any old dirty money you ain't got no use for?"

"Gimme a penny, mister. Gimme a penny."

He was surrounded. A circle of eager, starved bodies enclosed him. A ring of dirty, bright faces stared up at him, mouths ready to shape thanks or curses as the need arose.

Carla threw them a handful of small coins; they scrambled after them, yelling thanks, like monkeys in a zoo after peanuts. The comparison was not too farfetched at that, he thought.

There was something new ahead, something to relieve the monotony of the swarming ruins. It was a sparkling tower, almost blinding in the intensity of its pure whiteness—a temple of the new religion, the religion established less than two centuries ago by the scientific mystic, Sarn Sanderson. Here it was, rising like a phoenix from the ashes of the slums enclosed on all sides by dingy poverty but lifting out of it untouched, un-touchable.

Carla paused by the wide entrance, glancing in at the swirling, scintillating mists, reaching long arms toward the outer air but never extending beyond the walls of the temple. Through the diamond-studded mists Carla could see the magnetic purple effulgence of the Sign of Sarn suggesting but never delineating its outline. And occasionally through the mists could be seen the indistinct white-robed figures of the priests as they went about their duties.

There was promise in it all, a promise its neighbors found easy to believe. It promised satisfaction of innumerable hungers of the body and the spirit, a refuge from the pressing troubles of the world, fulfilment, peace. Here were dreams for the asking, miracles for sale. Carla frowned; his few experiences with the temple had been disquieting. There *had* been dreams and weird happenings that were hard to explain away.

Was the temple the answer? Carla shook his head. It was too easy; one didn't help the galaxy, one deserted it.

One didn't even improve one's own life, one cut it off behind. The answer might be there, but it was too well protected, too inaccessible, and there was no assurance that once the answer was found a man could leave with it—or would want to leave. The answer would have to be found in the realm of the living.

•THE SMOOTH PURR OF A car came from down the street. Carla glanced back. The sleek front was approaching rapidly, scattering the people from the street. They stood, looking after it, shaking their fists in impotent rage. The car was closer; Carla saw the slits in the windows and knew what it was.

With one fluid motion Carla vaulted over a railing into the protection of a series of steps descending below the street level to a basement apartment. Above his head a series of pellets raked the face of the building with a line of fire and crept slowly downward. Carla hugged the protection of the front wall. The fiery pellets crept closer. An agonized scream sounded above, a scream that was suddenly cut off. Then the pellets were bouncing upward off the pavement. The car roared and was gone.

Emerging slowly from his shelter, Carla found an old woman writhing on the pavement in death agony. Her lips were bloody and her limbs jerking spasmodically. She was alone. No one came near her; no one looked at her. The business of living in the slums was resumed. Death was no stranger to these people, even sudden death. What was one old woman, more or less?

Carla turned away. There was nothing he could do.

"Got a few minutes, mister?"

The low dulcet tones came from a flashy, skimpily dressed girl who could not have been sixteen. "I could make it worth your time."

Carla turned away, sickened. He walked on down the street, trying to get away.

"Cheapskate," the girl yelled, and other words that were not so nice, in tones that were now harsh and strident.

Carla bowed his head and strode on. Soon he would be out of the district and nearing his destination. He had a job and he wanted to get it over with. There wasn't much time now.

A few more blocks and he would be entering the residential district of the very rich, the rulers, the tyrants. In one of the palaces a meeting would be taking place amid luxury and comfort. He had an appointment there soon.

"Hey, mister! What's your hurry?"

The girls were leaning out of windows above him.

"Best girls in town."

"Very clean."

These were older; somehow it didn't bother him so much. He knew them, what they were, how they lived, what brought them here.

"Not tonight," he called.

"You don't know what you're missing; come back this way," they called after him.

No, not tonight, he thought. *Not tonight*. Tonight there was work to do.

• **PALACES LOOMED AHEAD**, dark, empty mausoleums of wealth, blotting out the blue-blackness of the night sky. This was not the season on Flora. The local rulers were enjoying the infinite delights of the pleasure planets. The palaces were deserted—no, not entirely deserted. Somewhere in these somber tombs of the people's wealth, the people's hopes and dreams, men were meeting in secret and sober deliberation to determine the future of the galaxy. And in his hands, Carla thought with a shiver, rested the responsibility for the success or failure of those conferences. It was almost too much.

Carla steadied himself. The slums were only a few blocks behind but, in reality, almost a score of years. He had come a long way. There was no turning back.

Was this the place? Carla checked

his bearings; this huge pile might be a little bigger, but it seemed as dark and deserted as the rest. Its long wide steps rose to a magnificent, wide, many-columned entrance. Carla checked again. This was the place.

He circled the palace, slipping from shadow to shadow, his eyes searching every possible hiding place. Nowhere was there any sign of guards. Carla hadn't expected any—guards attracted attention—but there must be nothing left to chance, no unnecessary risks taken. This had to succeed. There would be no second chance.

At the front Carla inspected every crevice for mechanical warning devices. None. Carla glanced at his watch; it was almost time. Caution had had its moment. Now was the time for action.

Quickly Carla mounted the steps. Stopping close to the pillars, he withdrew two small objects from his cape and his hands began to move rapidly. He stepped back, sighting, made a few adjustments, and marked a mental spot on the steps. Carla faded into the shadows of the columns.

Minutes passed slowly. Suddenly the massive doors sighed into a narrow opening; a man slipped between them and walked to the top of the steps, looking down on the dark street below. He breathed deeply. A shaft of moonlight from the smaller of Flora's two moons lighted up his face for a brief moment as he threw back his head.

"Eldred!"

The man turned, his eyes piercing the shadows. Carla walked slowly forward.

"John!" the man exclaimed.

Carla stared into the face which was so much like his own, yet subtly different. Not quite so hard, perhaps, yet lit from within by a stubborn flame that shone from the other's eyes—a flame which was hard to decipher at first, but after so many years John Carla thought he knew what it was.

"Well, Brother John—so we meet again." Eldred had recovered from his shock of recognition, apparently.

"Again," agreed John, "after so many years."

"Years which have not been wasted, eh, John?" chuckled Eldred.

"No—not wasted."

"We've come a long way since we parted in the slums," Eldred said, echoing a thought John had had only a few minutes before, "I am head of the League of Peace and you..." John was silent. "Well, it's obvious that you, too, have done well for yourself."

John nodded his head in silent agreement.

"But why have you turned up again after so many years?" asked Eldred. "It can't be just fraternal feeling." He laughed. "There was never much of that."

"No—it wasn't just that," said John. "How does it feel to have so much power in your hands—to shape the destiny of the galaxy?"

Eldred laughed easily. "You've been listening to too many rumors."

"Perhaps you're right—but I don't think so; that, primarily, is why I'm here."

"I heard you were on Flora, of course," Eldred shifted rapidly.

"I know. I met your welcoming party."

• **ELDRED CHUCKLED.**
"Clumsy fools. Too bad you gave yourself away at the port. You see, I know Davis. And I never forget."

"I thought it was something like that."

"That street fight was good work. You shouldn't have let the fat one get away, though. I wasn't certain at first, but when he described the fight I knew it couldn't be anyone but you." Eldred chuckled again. "I have too many scars from our childhood scraps, even though I was the older."

"You never were much good at man-to-man fighting."

"You escaped the police very easily. I had to get rid of the loudmouthed fellow. He was getting altogether too careless."

"I thought you had lost your touch in choosing men," John said; "he wasn't at all your type."

"Such men have their uses. His usefulness, alas, is at an end. The men in the car thought they had got you; I'll have to reprimand them."

"I'm surprised you took such pains to remove me. I didn't know you considered me so dangerous."

"I never take chances, John, when I can help it. You know that. But tell me, now that you are here. Why did you come?"

"This isn't the time for peace, Eldred."

"You do know about it then."

"The rulers, of course, are only too happy about your efforts. A few more years and they might face a galactic revolt."

"Peace is what the people want," Eldred said simply. "Peace is what they will have."

"But what kind of peace? That is the question."

"My kind of peace, of course," Eldred chuckled. "And they will love me for it."

"Exactly. I wasn't too concerned about the rulers; they are old-fashioned in their methods and thoughts. They will be removed or replaced soon in any case. But you!—that was another matter."

"Was it?"

"I know you too well, Eldred. Peace-maker isn't a big enough role for your ambition. You would be a king-maker—or even the builder of an empire."

"You overestimate my abilities," Eldred said slowly.

"But not your ambitions. No, Eldred—you were the sticking point. I'm giving you one last chance: Drop the peace efforts! Break up the conference! You can do it; you're the only one keeping this motley group together."

"You think I would do that?" Eldred said bitterly. "Now that I have victory in my grasp, do you think I would let you talk me out of it?"

"I didn't really think you would, but I wanted you to have the chance."

"I have my chance." Eldred had regained his composure. "Nothing can stop me." His hands were concealed beneath his long coat.

"Nothing?" John asked slowly.

"Nothing," Eldred answered, bringing into view a pellet gun in each hand. "Not even you."

John raised his hands slowly to shoulder level.

"I knew why you were here all the time," Eldred said. "I knew when you joined the Assassins and where. So they have condemned me. Ha! It will take more than the Assassins to stop me. Soon I will have the power and the information to wipe them out entirely."

"Eldred!" John made one step forward.

Eldred backed up. "Don't move any closer! I wouldn't like to end this before I'm finished; I want to enjoy this moment. I've waited for it long enough. My organization is even more extensive than even you suspect, John. The few years of peace will be enough to see me strong enough to take over—everywhere. Then you will see things hum."

"Eldred!" John moved forward another step, Eldred backing with him.

"I warned you, John," he said, raising his guns.

John raised his hands a little higher.

"This is it," Eldred said. "This is the end of our long trip, John." A smile lit his face. "After this, nothing..."

John raised his hands to their limit. There was a cough from a pellet gun. One of the two figures crumpled to the pavement, writhing in spasms of agony.

"I would have liked it to be quicker and easier," John said to himself,

glancing at the pillars where a pellet gun and electric eye clung in a pneumatic grip.

John looked down at his brother. "So long, Eldred," he said softly. "This is the end of our long trip."

He turned and strode quickly down the steps. At the top of the street, a policeman stopped him. John tilted his hat back.

"Oh, Mr. Carla," the policeman apologized. "I didn't recognize you."

John strode on, unhindered.

"Peace," he said softly. "Someday. A real peace."



"...But an assassin's hand struck down Carla at the moment success and peace seemed assured. Investigation of the killing only served to raise confusion with Carla being reported in several parts of the city at the same time and even having been seen leaving the place where his body lay crumpled in death. The assassin was never caught, and the reason for the insane killing never determined. So ended the galaxy's chance for peace for the time, although..." Milton George, Galactic History, v. 6, p. 298



You'll find another
top-notch story
by Edwin James

THE SUN CAME UP LAST NIGHT

leading off the
current issue of

**SCIENCE FICTION
QUARTERLY**

If I Forget Thee, Oh Earth...

by Arthur C. Clarke

He had long wondered what lay outside; and now, Marvin's father was taking him on the long-awaited trip...

WHEN MARVIN was ten years old, his father took him through the long, echoing corridors that led up through Administration and Power, until at last they came to the uppermost levels of all and were among the swiftly growing vegetation of the Farmlands. Marvin liked it here: it was fun watching the great, slender plants creeping with almost visible eagerness towards the sunlight as it filtered down through plastic domes to meet them. The smell of life was everywhere awakening inexpressible longings in his heart; no longer was he breathing the dry, cool air of the residential levels, purged of all smells but the faint tang of ozone.

He wished he could stay here for a while, but Father would not let him. They went onwards until they had reached the entrance to the Observatory, which he had never visited: but they did not stop, and Marvin knew with a sense of rising excitement that there could be only one goal left; for the first time in his life, he was going Outside.

There were a dozen of the surface vehicles with their wide balloon tires and pressurised cabins in the great servicing chamber. His father must have been expected, for they were led at once to the little scout car waiting by the huge circular door of the air-lock. Tense with expectancy, Marvin settled himself down in the cramped

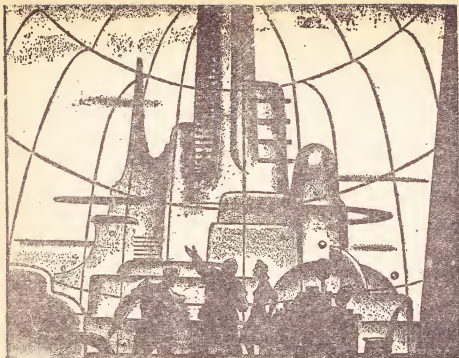
cabin while his father started the motor and checked the controls. The inner door of the lock slid open, then closed behind them; he heard the roar of the great air-pumps fade slowly away as the pressure dropped to zero. Then the *Vacuum* sign flashed on, the outer door parted, and before Marvin lay the land which he had never yet entered.

He had seen it in photographs, of course; he had watched it imaged on television screens a hundred times. But now it was lying all around him, burning beneath the fierce sun that crawled so slowly across the jet-black sky. He stared into the west, away from the blinding splendour of the sun, and there were the stars, as he had been told but had never quite believed. He gazed at them for a long time, marvelling that anything could be so bright and yet so tiny. They were intense unscintillating points, and he suddenly remembered a rhyme he had once read in one of his father's books—

Twinkle, twinkle little star,
How I wonder what you are.

Well, *he* knew what the stars were.

Let the past be remembered, the worst as well as the best, that there may be hope for the future.



Marvin had seen the wonderful sights of his world, but...

Whoever asked that question must have been very stupid. And what did they mean by "twinkle"? You could see at a glance that all the stars shone with the same steady, unwavering light. Marvin abandoned the puzzle and turned his attention to the landscape around him.

They were racing across a level plain at almost a hundred miles an hour, the great balloon tires sending up little spurts of dust behind them. There was no sign of the Colony; in the few minutes while he had been gazing at the stars, its domes and radio towers had fallen below the horizon. Yet there were other indications of man's presence, for about a mile ahead Marvin could see the curiously shaped structures clustering round the head of a mine. Now and then a puff of vapour would emerge from a squat smoke-stack and would instantly disperse.

They were past the mine in a moment; Father was driving with a reckless and exhilarating skill as if—it was a strange thought to come into

a child's mind—he was trying to escape from something. In a few minutes they had reached the edge of the plateau on which the colony had been built. The ground fell sharply away beneath them in a dizzying slope whose lower stretches were lost in shadow. Ahead, as far as the eye could reach, was a jumbled wasteland of craters, mountain ranges, and ravines. The crests of the mountains, catching the low sun, burned like islands of fire in a sea of darkness: and above them the stars still shone as patiently as ever.

There could be no way forward—yet there was. Marvin clenched his fists as the car edged over the slope and started the long descent. Then he saw the barely visible track leading down the mountainside, and relaxed a little. Other men, it seemed, had gone this way before.

•NIGHT FELL WITH A shocking abruptness as they crossed the shadow line and the sun dropped below the crest of the pla-

teau. The twin searchlights sprang into life, casting blue-white bands on the rocks ahead, so that they scarcely needed to check their speed. For hours they drove through valleys and past the feet of mountains whose peaks seemed to comb the stars; sometimes they emerged for a moment into the sunlight as they climbed over higher ground.

And now on the right was a wrinkled, dusty plain, and on the left, its ramparts and terraces rising mile after mile into the sky, was a wall of mountains that marched into the distance until its peaks sank from sight below the rim of the world. There was no sign that men had ever explored this land, but once they passed the skeleton of a crashed rocket, and beside it a stone cairn surmounted by a metal cross.

It seemed to Marvin that the mountains stretched on forever: but at last, many hours later, the range ended in a towering, precipitous headland that rose steeply from a cluster of little hills. They drove down into a shallow valley that curved in a great arc towards the far side of the mountains; as they did so, Marvin slowly realised that something very strange was happening in the land ahead.

The sun was now low behind the hills on the right; the valley before them should be in total darkness. Yet it was awash with a cold white radiance that came spilling over the crags beneath which they were driving. Then, suddenly, they were out in the open plain, and the source of light lay before them in all its glory.

It was very quiet in the little cabin now that the motors had stopped. The only sound was the faint whisper of the oxygen feed and an occasional metallic crepitation as the outer walls of the vehicle radiated away their heat. For no warmth at all came from the vast silver crescent that floated low above the far horizon and flooded all this land with pearly light. It was so brilliant that minutes passed before

Marvin's eyes could accept its challenge and look steadfastly into its glare; but presently he could discern the outlines of continents, the hazy border of the atmosphere, and the white islands of cloud. And even at this distance, he could see the glitter of sunlight on the polar ice.

It was beautiful, and it called to his heart across the abyss of space. There in that shining crescent were all the wonders that he had never known—the hues of sunset skies, the moaning of the sea on pebbled shores, the patter of falling rain, the unhurried benison of snow. These and a thousand others should have been his rightful heritage, but he knew them only from the books and ancient records, and the thought filled him with the anguish of exile.

Why could they not return? It seemed so peaceful beneath those lines of marching cloud. Then Marvin, his eyes no longer blinded by the glare, saw that the portion of the disc that should have been in darkness was gleaming faintly with an evil phosphorescence; he remembered. He was looking upon the funeral pyre of a world—upon the radioactive aftermath of Armageddon. Across a quarter of a million miles of space, the glow of dying atoms was still visible, a perennial reminder of the ruinous past. It would be centuries yet before that deadly glow died from the rocks and life could return again to fill that silent, empty world.

• **N**OW FATHER BEGAN TO speak, telling Marvin the story which until this moment had meant no more to him than the fairy tales he had heard in childhood. There were many things he could not understand; it was impossible for him to picture the glowing, multicoloured pattern of life on the planet he had never seen. Nor could he comprehend the forces that had destroyed it in the end, leaving the Colony, preserved by its isolation, as the sole survivor. Yet he could share the agony of those

final days, when the Colony had learned at last that never again would the supply ships come flaming down through the stars with gifts from home. One by one the radio stations had ceased to call; on the shadowed globe the lights of the cities had dimmed and died, and they were alone at last, as no men had ever been alone before, carrying in their hands the future of the race.

Then had followed the years of despair, and the long-drawn battle for survival in this fierce and hostile world. That battle had been won, though barely; this little oasis of life was safe against the worst that Nature could do. But unless there was a goal, a future towards which it could work, the Colony would lose the will to live and neither machines nor skill nor science could save it then.

And now Marvin understood the purpose of this pilgrimage. He would never walk beside the rivers of that lost and legendary world, or listen to the thunder raging above its softly

rounded hills. Yet one day—how far ahead?—his children's children would return to claim their heritage. The winds and the rains would scour the poisons from the burning lands and carry them to the sea, and in the depths of the sea they would waste their venom until they could harm no living things. Then the great ships that were still waiting here on the silent, dusty plains could lift once more into space, along the road that led to home.

That was the dream; and one day, Marvin knew with a sudden flash of insight, he would pass it on to his own son, here at this same spot with the mountains behind him and the silver light from the sky streaming into his face.

He did not look back as they began the homeward journey. The lunar dust sprayed from beneath the broad tires as the car plunged once more into the valley; soon the rocks above them no longer blazed with the cold glory of the crescent Earth.

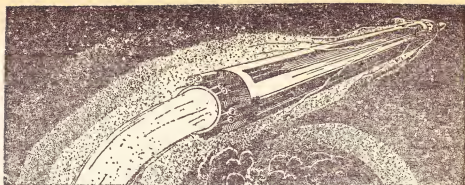
THE RECKONING

A Report To Future's Readers

As a rule, every story in an issue will pick up at least one first-place and last-place vote, and usually someone will list it as "disliked". Program was different on the May issue: First of all, Del Rey makes a record by writing the first short story for us which came out on top. Coppel didn't receive a single red mark (we put down "dislike" votes in red), and neither he nor Anderson took a single last-place vote. Most controversial story in the issue was Haggard's, which picked up the most ripe fruit; only the raspberries were overbalanced by the top and second-best ratings. Here's the score sheet, then:

1. Mind of Tomorrow - del Rey	3.22
2. Honorable Enemies - Anderson	3.52
3. The Awful Weapon - Coppel	3.61
4. Out of the Atomfire - Rocklynnne—Walton	4.47
5. Fun Can Last Forever - Haggard	4.72
6. Time Killer - Dye	4.80
7. Dark Cloud - Wilson	5.43
8. "A" is for Android - Lesser	5.76

And an original to Jay Tyler for the best-received letter in "Down To Earth".



STAIRWAY TO THE STARS

It was a stairway leading down, but it also led out into space—indirectly. And the situation had the aspects of a burlesque on Grand Hotel, but...

By Larry Shaw

JOHAN ANDREW FARMER scowled at the octopus that sprawled on his living-room couch, rubbed his stubbly jaw with a stubby fist, and said, "I love you."

Farmer was uncomfortable. He was almost always uncomfortable, for various reasons; though it rarely if ever occurred to him, as he considered each individual irritant, that this was his normal state of existence. Right now he was acutely conscious of how ridiculous it must look for him to be making love to an octopus, but he was even more conscious of the very real pains of unrequited love.

It wasn't even a respectable, ordinary-looking octopus. To be accurate, it would have to be called a nonapus; each of the nine tentacles had a lobsterish claw at its tip, and there were various other unusual appendages. It

would be hard enough to explain an earthly octopus in his living-room if the necessity arose, Farmer reflected for the teenteenth time—but how in the name of Neptune could he ever explain *this*?

It had all started with Judge Ray. Ray had not been a real judge, obviously, but had used the title in lieu of any other first name. That was the first of the inexplicable things; Farmer would have expected the odd little old man to call himself a professor of something or other. But Ray insisted on Judge.

Ray had come to the office of the *Stein, Fine, Bryans Publishing Co.*, where Farmer was working as an assistant editor, and announced that he was about to write the greatest book

Yes, Earth may be a sort of fenced-off area, so far as other intelligent races of the galaxy are concerned. But not for the grandiose reasons that some have imagined...

of the age. And yes, he wanted an advance against royalties—it didn't have to be large; Ray lived simply—to tide him over while doing the actual writing, which shouldn't take more than a very few weeks.

Now, Farmer wasn't much of an editor, even as editors go. The one useful quality he had was a homespun, ingratiating air which put nervous young geniuses at their ease, so that they could give a reasonably coherent verbal picture of what their books were about. This often saved Stein, Fine & Bryans a lot of reading of unpublishable manuscripts. At least, that had been the theory when they gave Farmer the job; as it worked out, John Andrew was a person who found it virtually impossible to say "no"; he generally took the manuscripts in hand and, when he couldn't stick some other member of the firm with the task, read them himself until the wee hours.

Farmer was not able to say no to Ray, but even he looked dubious at the small gray fellow's voluble outpouring of pseudo-scientific jargon. Ray, made sensitive by years of open skepticism on the part of many listeners, caught the look and insisted on a demonstration of his fabulous invention.

So the oddly assorted pair—quick, foxlike little Ray and big, awkward, uncomfortable Farmer—sputtered out into Long Island Sound in an indescribable old motor launch, and the adventure was on.

FINALLY RAY SHUT OFF THE racking engine and let out the rusty anchor. He opened a large wooden case, which showed evidence of some really good cabinet-work, and took out a peculiar machine, which showed evidence of unarguably excellent machining. These details were the first things that made Farmer think Ray might not be a complete crackpot, after all. If he hadn't been feeling just the slightest touch of seasick-

ness, John Andrew would have breathed a sigh of relief.

Ray polished off the somewhat rabbit-from-hatty routine by bringing out a portable television set, connecting it to the boat's electrical generator, and stringing an assortment of wires between it and his invention. He would not allow Farmer very close to the latter, but to the editor's untechnical eye it looked like a fairly ordinary radio set, with more than enough dials and switches added to it to furnish the dashboards of several Rolls Royces.

Ray held up a hand—purely for drama, since there was silence already. "This is a great moment in the course of human history," he said. "You are about to witness the first demonstration of Ray's Ray, the work of genius which will allow mankind his first really close contact with the last remaining frontier on his home planet—the bottom of the sea!"

Farmer looked impressed, then began to realize what some of this meant. He caught himself, straightened out his face, and licked his lips. "You mean you've never tried the thing before?" he protested. "How do you know it will work?"

Ray's glance took on a touch of icy fury. The launch rocked gently in the swell for a long, silent minute, and Farmer began to feel slightly afraid. Was he alone, in a spot like this, with a madman? The salty breeze turned colder.

Then Ray smiled—a smile that was surprisingly soft and sweet. John Andrew reached two decisions: that he was safe, and that he liked the "Judge." (One of Farmer's weaknesses, in fact, was that—though thoroughly masculine himself—he completely distrusted women, and was too trusting with men.)

"I could go into theories and scientific details," Ray said; "I could explain principles of operation and the construction of the machine for hours.

But you would be bored, and wouldn't understand anyway. It is sufficient to say that the Ray will work because—I invented it!"

Farmer caught himself nodding, and blamed the boat's motion. He shifted uneasily on the built-in seat, and got a splinter in a vital spot. He frowned.

Ray was bending over his machine, making motions designed to impress as well as to make it work. "In very simple terms," he was saying, "this is a combination of color television and super-radar. It will bring in a perfect color picture of the ocean at whatever depth I set it for, or will set itself automatically to present a view of the ocean floor. It will..."

His voice trailed off. The machine hissed, snapped, and crackled. The television set flickered, hummed, gave out a flashing dance of surrealistic doodles, and abruptly presented a picture. It was a picture of Milton Berle.

Ray looked mad, started to aim a kick at the screen but thought better of it. A small wave almost made him sit down on the deck before he got both feet planted again. He swore and started to check the wiring.

"Maybe there's something wrong inside the dingus itself," John Andrew suggested tentatively.

Ray turned on him with a look that would have seared the Sphinx. "There's *nothing* wrong with the machine!" he said, almost-but-not-quite shouting. "There's *nothing* wrong with the television! There's *nothing* wrong with the wiring! There *must* be something wrong at the other end—where the Ray is focussed! And I intend to find out!"

Farmer pondered the idea of a transmitter that worked under water like a ball-point pen, broadcasting weary vaudeville routines. He scratched his head and looked wistfully at the New England shoreline—or was that Long Island? He wasn't sure any more...

• **A** CLANK AND CLATTER brought his attention to the

launch. He gawked; Ray had thrown back a deck hatch and produced a diving suit which looked as un-shipshape as the rest of the boat's equipment.

Ray looked it over hastily, then turned a speculative glance on Farmer. He shook his head. "Too small for you," he murmured. "You wouldn't know what to look for anyway; I'll have to go down myself."

Farmer changed his mind again about Ray's being cracked. "Listen." He said the first thing that came to mind. "Didn't you say you rented this boat for the first time today? How do you know that thing doesn't leak?"

Ray smiled again, as he climbed briskly into the suit. "I'll be all right," he said serenely. "You just keep an eye on things here—but don't touch anything. I'll be right back..." He settled the helmet on his head, motioned for Farmer to help him check the connections of the suit's self-contained oxygen supply.

John Andrew was straightening up from doing this when he saw the nonapus for the first time. It was climbing over the rail at the stern, and already beginning to make a puddle on the deck. Farmer froze, and gulped wordlessly.

Behind the barred faceplate, Ray looked puzzled, then annoyed. From the corner of his eye, Farmer could see Milton Berle still cavorting silently on the television screen, and this seemed to add the final touch of insanity to the scene. Farmer finally succeeded in pointing, and Ray clumped slowly in a half-circle, just as the nonapus dropped to the deck with a plank-shivering thump.

The scene assumed some of the aspects of a bad movie comedy. The background was an out-of-focus blur, although Farmer was dimly conscious of motion in it somewhere—something else breaking the surface of the water as it emerged. In the foreground, the boat and its occupants were sharply etched, but seemed to have gone into slow motion.

The nonapus crept forward ponderously, and Farmer searched dazedly for a weapon. It was Ray who first started stumbling in the direction of the boathook, but John Andrew, in a sudden fit of bravery, shoved past him and grabbed the fragile-looking thing from its cleats.

He swung to face the monster with a sick feeling in his stomach, and got another surprise. The thing had stopped moving. Straddling the rail behind it, and similarly dripping, was a—*migawd!*

It—he—looked almost like a man, but that only made the difference worse. The details resolved as Farmer stared at him. The oddness about head and shoulders became finny crests; what had looked at first like a red skin-tight costume became a scaly hide. Farmer realized with a shock that the creature wasn't wearing anything.

Farmer crouched. The point of the boathook wavered, aimed first at the nonapus, then at the fishman. To the editor, both were alien—but he couldn't decide which one was more dangerous. For a long moment, neither of them advanced, and he wondered if they could really be frightened of his puny weapon.

He doubted it. He was beginning to notice, among other things, that the nonapus was more fearsome than it had seemed at first—in addition to nine tentacles, claws, fangs and antenna became apparent. So did the big glassy-red disks of the eyes—and Farmer aimed the point of the hook at one of them, started to thrust.

It was wrenched from his hands and forced downward to stick quivering in the deck. The development took Farmer completely unawares. Neither of the aliens had moved; it was Judge Ray who had disarmed him.

● JUDGE RAY WAS NOW frantically trying to remove his diving helmet again. Excitement made his motions ineffective, and he sig-

naled for Farmer to help him, then continued to fumble with the fastenings himself. John Andrew turned, feeling completely doomed, to aid the man, and they started getting in each other's way and slowing down the operation even more.

They finally succeeded, though; the helmet swung back, and Ray promptly shoved Farmer aside. Some of Farmer's fear gave way to amazement at the little inventor's audacity and what seemed to Farmer at least to be foolishly optimistic scientific detachment.

Ray said: "My name is Ray. It is indeed fortunate that you have met me immediately upon your arrival here, since I am the world's greatest genius, and thoroughly equipped to tell you anything you wish to know about my people and civilization. I take it you come from Atlantis?"

Amazingly, his tongue only got tangled once in the middle of this speech, and he regained control of it quickly then. John Andrew felt a touch of jealousy at the little man's capability in assuming control of the situation. That, and a sudden idea of his own, forced him to speak for himself.

It was a sad attempt. "Venus... Spaceship..." he managed to croak, before giving it up.

The launch rocked gently. The nonapus crouched motionless; the fishman stood firmly, as if untouched by anything around him, his arms folded and a faint smile upon his damp lips.

Finally he spoke too. What he said was: "Venus. Spaceship. My name is Ray. It is indeed fortunate that you have met me immediately upon your arrival here, since I am the world's greatest genius..."

He broke off. Apparently he interpreted the looks of consternation on the faces of his audience correctly, for his smile became more friendly and he continued in a casual tone.

"Excuse me," he said. "I didn't speak your language before I arrived here, and I had to learn it and become

accustomed to its use through analyzing what you just said. I really didn't mean to puzzle you or make you feel inferior by mimicking you."

Farmer's mind worked chaotically. This was puzzling, he decided, and *did* make him feel inferior—that is, it did if the man in the red scales had really picked up English so quickly. And if not, why lie?

•THE FISHMAN CAME forward. His step was bouncy, as if he were used to a higher gravity or greater pressure (*that*, Farmer complimented himself on his cleverness, made sense at least), but he extended his hand and said "Put 'er there!" like any ladies' wear buyer at an annual convention. Ray and Farmer shook with him in turn. His hand was damp and webbed, but felt fairly human for all that.

"My name is Garf," he said cheerfully. John Andrew tried not to stare at him too noticeably, but Ray made no bones about it; apparently the fishman thought nothing at all of his state of nudity. Farmer shivered.

It was Ray who brought the conversation back to earth—or sea—again. He asked Garf, directly, exactly where he did come from.

Garf looked hesitant, then waved the two to the rail with him. "See those?" he asked. They looked, and saw what seemed to be a flight of steps, carved from stone, old, and worn, starting abruptly just below the water level and leading downward. There was nothing on either side of the steps, or underneath them as far as could be seen, but ordinary ocean. "I came up those," Garf said.

Farmer stared, and Ray stared. The stairway shouldn't be there—it certainly hadn't been there before. Garf's explanations, it seemed, only compounded the confusion caused by his presence.

Farmer, muddled, looked again at the nonapus, which had apparently

gone to sleep. Even so, it looked dead-ly.

Something bit him on the arm. He discovered Ray's fingers, in the diving glove, digging into his flesh in an amazingly powerful grip. Farmer hunched his shoulders, trying to break loose, and then he saw what Ray was staring at.

Garf had left them, and was strolling around the launch as if he had just bought it—looking down his nose at it; at the same time, acting as if he could afford not to give a damn how badly he'd been stung. But the startling thing was that he had picked up the boathook and was twirling it unconcernedly. He had not only picked it up, however—he had also tied it in a knot.

It should have splintered in his hands, assuming he was strong enough to bend it at all. It hadn't; it was in perfect shape, except for the knot. Or so it seemed, at least, for even as Ray started forward with outstretched hand, obviously hoping to examine the thing, Garf gave it a final twirl and scaled it carelessly overboard.

John Andrew began to feel quick-frozen again. Being alone at sea in a rickety craft with a possible madman had been bad enough. To have a weird creature with superhuman powers, and an impossible pet monster, added to the crew was a little too much.

•GARF TURNED HIS attention to the television set, which was still presenting its hysterical vaudeville. "Great-uncle's gills!" he exclaimed, and lapsed into a fascinated silence. He studied the proceedings carefully, holding the arms-crossed pose again. Finally he turned to Ray.

"Weren't you saying something about civilization a while ago, fin-ness?" he asked. His voice was sneering.

Ray frowned, and said something about mass-appeal. "Pay no attention to *that*," he continued. "Just listen to

me. I'll tell you about our civilization, and our science, and..."

His voice broke off as if he had been struck in the face. In a way, he had; Garf had deliberately turned his back on the old fellow. The Judge's bloodshot little eyes darted about as if he wanted to pick up something heavy and hit Garf on the crest with it.

John Andrew's brain had finally resumed normal operations; he was thinking slowly, but clearly. He examined the evidence with care. He decided that Garf's superior attitude and powers boded no good; that if the fishman once became slightly irritated he would sic the nonapus on Ray and himself. (Probably, in fact, Garf would try to conquer the world anyway; that was how it went in stories as corny as this situation.) Farmer further decided that Ray was too egocentrically eccentric to be trusted to get them out of this fix; he decided he'd have to do something himself.

Having decided all this, Farmer went back over the territory to see if he could find any flaws in it—or any other way out. It still made sense, and he added a decision to get the boat back to shore as fast as possible. He approached the engine.

As he did so, the engine melted into a solid, irregular lump of metal. John Andrew gulped, and put out a tentative hand toward the fused mess. It was not particularly warm—but it had melted.

Farmer looked at Garf again with fear and awe, and the fishman looked back with cold amusement. But not for long. Garf turned to the Judge's invention—and started to show some genuine interest for the first time since he had showed up.

He stood over the thing, webbed hands on scaly hips, peering at it intently. After a long silence, he knelt, and started feeling over the machine with his webbed hands. Finally he placed his fingers on the largest of the control switches—then changed his

mind and gestured imperatively to Judge Ray.

"You—the 'intelligent' one," he said. The quotes around 'intelligent' were clear in his intonation. "Explain this to me. It's obviously what reactivated the gate—but whoever made it did a screwball job. There are all sorts of things that don't seem to belong, and even the parts that should be there seem wrong, somehow..."

He paused. "Of course," he added, smugly, "I'm not a transportation expert. If I were, I'd have made my own activator long ago, and done some visiting on the closed worlds before this. Not that they'd have kept me from getting bored for long, but yours looks as if it's going to be slightly amusing, at least."

A struggle showed in Ray's face. Farmer saw insulted anger, hurt pride, a desire to brag about his gadgetry, a question about Garf's last words, and a caution that was not too far from fear. John Andrew had stopped trying to hide his own fear, and though he had plenty of questions of his own, he was mainly concerned with looking for a means of escape.

Garf was rising again, looking impatient. Ray reached a decision, said "Go to hell!", and turned his back on the fishman. Garf looked astonished, then angry, and raised a hand. Ray jumped, not very far because of the heavy diving suit, stumbled on oddly twisted legs, and collapsed on the deck, writhing, moaning, and turning red in the face. The diving helmet clattered on the planks.

Farmer got mad. He started to charge across the deck at Garf, but his own feet went out from under him and he landed flat on his nose. There were waves of fire chasing each other around his body, and his stomach was trying to turn itself inside out.

• **AS INSTANTANEOUSLY AS IT** had come, the pain left him. It left him weak and quivering, and John Andrew Farmer lay on his back

waiting for his strength to seep back. As the red haze drifted from before his eyes, he realized that the launch had acquired another occupant.

In appearance, she could easily have been Garf's sister—or his wife. Her figure was lithe and nicely curved. Her scales stopped in eye-catching points just above her distinctly mammalian bosom; from there on up she looked almost completely human. She wasn't wearing anything either. The over-all effect was oddly beautiful. Farmer blushed hotly, and tried to keep his eyes on her face.

Not that it made any difference to her. She ignored everyone and everything but the fishman. Glaring at him angrily, she snapped out his name in an icy voice. "Garf!"

"Dor!"

Garf was a changed fishman; he looked faintly frightened, moderately worried, and definitely embarrassed. This passed, and he started to smile in a placating manner.

"Garf!" Dor snapped again. She followed it up, this time, with a string of intricate, foreign-sounding words that even Farmer could tell were hot and stinging.

The fishman backed away. He seemed to be growing angry himself now under the whiplashing woman's tongue. Finally he spoke, in English. He called Dor a puddle-snake. That wasn't all of what he said, by any means; the name was preceded by several adjectives and followed by an obscene command. Dor blanched slightly.

"Oh, yes?" she said, her voice dripping danger. "I can speak this language too, you know—I learned it years ago, before the gate to this world was closed! And let me tell you something else..."

She told him something else. John Andrew blushed furiously again, and covered his ears with his hands.

Little Ray was on his feet, trying to get a word in edgewise, but not succeeding at all. He too started to get

angry. Farmer hauled himself upright, hoping to approach Ray, calm him, and get him to figure a way out of this madhouse.

Garf yelled an expletive and gestured with his hand. A wave of pure heat swept over the boat, blistering what paint it still boasted. The blow had been directed at Dor, and she showed that she had absorbed most of it by wilting visibly—but Farmer felt as much of it as he wanted. It was as if a blast furnace had suddenly opened beside him; sweat popped out on his brow and filmed his eyes. He wondered how uncomfortable he could get.

A deadly silence descended.

JOHN ANDREW WAS wishing that he could swim when Dor smiled, and he began to be interested in living again in spite of himself. The girl, he thought, was somehow radiant—really lovely, in spite of her scales and fins. It was peculiar; he'd never liked women at all, and had certainly never thought he'd like a mermaid, but...

Anyway, he decided, he wasn't going to take sides if the two aliens were going to fight it out. His first interest was in saving his own hide; his second, in getting back to shore to give warning of the invasion. As for Dor—John Andrew had lived this long without going to the aid of a damsel in distress—without, in fact, ever seeing one that he could remember, who wasn't obviously more capable of helping herself than he was. He wasn't going to start rescuing fair maidens now—even if she needed rescuing. Still, there was something awfully attractive... Damn, but he was confused!

Dor's smile didn't really last that long; Farmer's thoughts were going fast now, somehow. He had finished those just described before Dor said, "All right, Garf. Fun's fun; now let's kiss and make up. After all, it's illegal for us to be here—not only our own cops, but the Galactic Federation, would be on our necks if they knew.

Let's see if we can close up the gate ourselves or if this needs to be reported. And then let's go home."

Garf grinned. "Whatever you say, my dear." He dipped an eyebrow in a wink. Behind Dor, the nonapus stirred sluggishly, extended a tentacle, opened a claw, and nipped Dor neatly on the behind. She screeched.

There was an explosion in Farmer's brain. This was too much—Garf had gone too far! The burly editor plunged across the deck, swinging a fist. To his surprise, Garf did nothing to stop him; probably, John Andrew figured later, the fishman expected no further trouble from the humans after the treatment they'd had.

Farmer's haymaker connected.

Garf staggered across the deck until he brought up against the rail, holding his jaw and shaking his head muzzily. Farmer braced himself for retaliation, hoping it would be something less than a bolt of barbed lightning. But Garf remained unpredictable. He mumbled something that wasn't "Oh the hell with it" but sounded like it, and softly and silently slid overboard. He disappeared under water with scarcely a ripple.

"Good!" Dor said, briskly. "Now, I'll just... Ah!" She strode directly to Ray's invention, and Farmer wondered why both the aliens were so interested in a gadget that didn't work.

DOR WASTED NO TIME. SHE bent over, picked up the machine, yanking wiring loose carelessly, straightened up, turned a beaming smile on Farmer and Ray, said "Good-bye," and headed for the rail.

Ray yelled. He started after her, but his progress in the diving suit was waddling and slow. She reached the rail first and went over. Ray was not too far behind, and he slammed his helmet down angrily as he reached the rail. Farmer, galvanized belatedly, gave chase as well.

Dor was picking her way slowly down the stone steps, the machine

cradled under her arm. Ray climbed up on the rail, poised there a second, then attempted a swan dive. John Andrew yelled at him as he arced forward, but it was too late. The old man dropped like a stone, flapping his arms, bounced slightly on the top step, then slid forward down several more steps on his faceplate.

Dor hesitated, her head just above water. She looked at the limp, diving-suited body beside her, then back at the launch and Farmer. Again, she came to a decision quickly.

Bending, leaving a trail of bubbles as her head went under, she set the Judge's invention down on a lower step and picked up the Judge instead. Cradling him in her arms, she started back up again, calling to Farmer to be ready to take her burden aboard.

They got him on the boat with little difficulty, and John Andrew laid him on the deck as Dor sprang lithely over the rail again, showing interest in the little fellow's condition. The diving helmet came off easily, not having been properly fastened down at all. Farmer bent anxiously over the Judge, looking for signs of life.

The diving suit had shipped some water, and the Judge had gotten a nasty crack on the head—but he was a tough bozo. There was no blood, his breathing seemed almost normal, and he already showed signs of returning consciousness.

John Andrew turned to Dor. "Well, I should thank you for bringing him back, I guess," he muttered. "But now that you're with us again"—he shot out a big paw and grabbed her by the wrist—"how about explaining some of this?"

He was very gentle with the wrist. He didn't want to hurt her; he was wondering already, in fact, what had made him get so rough at all. But she didn't seem to mind.

"I've got to go quickly," she told him. "I think Garf will be all right now, but he may take a notion to come back. And I have to see that the gate is closed before..."

"What gate? Get back where?"

Farmer managed to put more curiosity than impatience into his tone.

"Back to my own planet—Tamdivar, sun Nogore, member of the Galactic Federation," she said patiently. "The gate is a matter-transmitter between my world and yours. It was once in constant use, but my government closed it when you people got to the point where you were running around in submarines, using depth bombs, and just noticing our aircraft too much."

•SOMEHOW, WHAT POPPED into Farmer's head was the chorus of an old song he had sung in boy's camp when very young. *"There's a hole in the bottom of the seal There's a log in the hole..."*

"Your machine reactivated the gate from this side, even if that isn't what you designed it to do," Dor went on. "It's a good thing I noticed the gate was open. Of course, the area effected isn't large—it includes those steps and a lot of water around them."

"The gate'll stay open now until it's closed from our side—but I'll have to take your outfit back and destroy it, anyway. Our cops would be tough with you if they found you operating the thing, and Federation Securitymen would be even tougher. Take it as a warning: don't do it again."

She turned to go, but Farmer held on. "What's this about a Galactic Federation? And if they've banned all communication with Earth, why haven't they just blasted the planet out of existence and gotten rid of it? Of course, I know we're thoroughly uncivilized and too warlike for any other race to trust, and all that. I can see how Earth might be considered the plague spot of the universe..."

Dor gawked, and saw that he was very serious. Then she threw back her head and laughed a merry laugh. "Listen, friend," she said at last. "The only real trouble with you Earth people is that you have a tremendous inferiority complex, collectively and individually—as you've just illustrated.

Get over that and you'll eliminate most of your trouble. As for the Federation, they let us in, and most member-races have wars occasionally; they'll undoubtedly accept you, once you develop space travel.

"Just at the moment, of course, you're at a crossroads. You could jump in either direction, blowing yourself up or taking the big step into space. I think you'll turn out okay, but not everybody agrees—and the Federation can't take even small chances. So you can't be allowed to set off your atom bombs, or worse, where they might get through to another planet. We can't actually interfere with you, so we've closed the gates; that's all."

John Andrew, thinking it over, said "Oh," and let go of her wrist. She turned and went back to the rail again, after flashing him the most deluxe smile so far. Farmer came out of a philosophic haze to notice she was leaving. He said, "Hey!"

She looked over her shoulder. Farmer didn't know what to say, but he wanted to delay her. Finally, he pointed to the nonapus, and said, "What about that monster? You're not going to leave it here?"

She laughed again. "Oh, the robot? It'll follow me. It's designed to... Oh damn!"

The damn was for something she saw in the water as she looked back over the rail again. John Andrew rushed to her side and looked as she got set for a dive. Garf, he saw immediately, had returned, and was picking up the Judge's invention.

"Put that down!" Dor's yell was high-pitched. Garf faced them, and Farmer could just make out his lazy, contemptuous smile through the murky water. The fishman raised his arm in one of the now-familiar gestures.

The boat heaved, wallowed, and sank.

Farmer thought desperately again that he couldn't swim, and then he thought wildly of the Judge, who hadn't regained full consciousness. He went under once, and came up chok-

ing and sputtering. He decided his end had come—and he didn't even know the identity of the enemy who had done him in. It was ironic. He should have asked Dor to tell him more about Garf—was he a traitor, or a Tamdivarian gangster, or what? John Andrew gasped and started sinking again...

To find himself hauled out of the water unceremoniously by the scruff of his neck. As he rose, ropy tentacles twined about him, and he saw what had saved him. He was being cradled, gently but firmly, by the nonapus, which had Judge Ray in another set of tentacles. And the nonapus, it became apparent, was not only a water-creature.

It could also fly.

GARF PADDED IDLY around Dor's apartment, pretending interest in the shell-paintings that decorated the walls. He had presented her a bouquet in which rare blossoms hid slimy, smelly weeds, and she was sore at him—again. As she finished her conversation and switched off the two-way radio, he turned to her. "Dor," he said softly.

She looked at him haughtily. "Don't speak to me!" she said. "I told you you'd have to stop your irresponsible practical joking and settle down. Some hard work wouldn't hurt you even if you did inherit a fortune. I don't mind so much when you pull these stunts on me, but when I think of how you practically drowned those poor, defenseless Earth-creatures..."

His mouth twisted. "Poor, defenseless Earth-creatures! How was I to know they couldn't swim? Just imagine—beings that live on a world with almost as much water as ours, who can't use their natural abilities any more than that! It's ridiculous. I never saw such morons—the big, ugly one especially!"

He had intended that to sting, and it did. Dor raised her nose another notch. "I think he's cute, and I'm learning he's pretty intelligent, too. He catches on fast to everything I tel-

him. He and his little friend will have their spaceship finished soon now, and..."

"That's another thing!" Garf snapped, keeping her on the defensive. "Maybe I violated Security by going to Earth when they accidentally opened the gate, but what are you doing? What would the Fed say if they knew you were giving out information the Earthmen hadn't acquired by themselves—helping them get into space? What about that?"

Dor shrugged. "I'm not telling them anything, really. Just dropping a few hints of the most elementary sort. Things they'd have figured out soon anyway—and things they still have to work hard to make practicable. Even if some of the inventions they've worked out so far have enabled them to make enough money to live on nicely—after all, those things are the merest toys to us—what could it possibly matter?"

Garf considered. This bickering was, as usual, getting them exactly nowhere. He gave up. "All right, dear," he said. "You win; you're right, of course, and I'm wrong. I only hope you won't bother so much with talking to that Earth-slug on the radio after we're married."

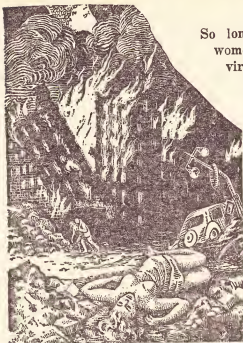
Dor laughed a tinkly laugh and came into his waiting arms. "Darling," she cooed. "What a thing to say. I actually believe you're jealous—and you know I only love you."

Which wasn't strictly true. The big Earthman *was* cute, she thought, and it was quaint of him to be in love with her, and to tell her so every day over the radio built into the robot-nonapus. Of course, he was inferior to her in every way, and she wouldn't think of marrying him or anything like that. But even his inferiority was interesting, in a way.

Yes, it was nice to know he loved her.

And she loved him, too—like an amusing baby brother.

REGENERATION



So long as there are men and women alive, in a livable environment, then a new beginning is possible.

by Charles Dye

It has been truly stated that those who fail to learn and understand history, are condemned to repeat history!

lying half-buried in the soil at his feet.

"Another *death-thing*, maybe," Sinzor said. "Another *'thing* our ancestors made with which to destroy themselves." He peered around the semi-circle of men until he spotted the aged one with a leg missing. "Morge! See that this place is marked forbidden."

The hunting party moved on and Morge stayed behind. He hobbled about, collecting sticks and stones, arranging them in the "forbidden-symbol" way to form a barrier around the *'thing*. It was because of such a *'thing* that he'd lost a leg in his youth. He both hated and feared the *death-things* his ancestors had so carelessly left lying about before they vanished. But that wasn't right. Morge scratched his grizzly old head and thought hard. According to Builder, wisest of their tribe, their ancestors hadn't all vanished; some of them had become the tribe—Sinzor, Builder, and even old Morge. Very puzzling. But it was all because of the *death-things*!

Puffing, Morge completed the barrier, then turned for a last look at the *'thing* gleaming dully in the pale

For those in the cities, it was the end . . .

It was bound to happen sooner or later.

Not because man failed to understand his fellow man, but because he failed to understand himself.

There wasn't much left afterwards—after the golden showers of deadly dust and the blinding flashes that blotted out the light from the sun.

And all because man continued to confuse emotion with reason.

But somehow, as before, man survived . . .



"DON'T TOUCH!" Sinzor's command shot through the chill morning air like an arrow.

The ragged little group of men stopped dead in their tracks and looked questioningly at their leader. He was pointing down to an object

winter sunlight. How strange it looked. In no way did it resemble the usual *death-things*, most of which were long and round with little wings attached. This one was different, like nothing he'd ever seen before. It was boxlike with strange arms sticking up; and under the arms, half-buried, was a shelf or platform resembling vaguely the upper portion of two legs. The *'thing* terrified Morge for a moment; then, in order to prove his courage to himself, he stepped forward and spat on it. Nothing happened. Sneering, he spat on it again and watched his spittle slowly run down its side over a strange marking like a thunderbolt—
Thunderbolt!

Suddenly Morge fell grovelling to his one good knee. It was Thor, god of thunder and lightning and god of the tribe!

And he had spat on Thor!

• **F**OR NEARLY AN HOUR HE knelt there praying forgiveness for his sacrilege. Then, trembling, he tore off a piece of his goatskin and wiped the spittle off Thor's side, carefully began to uncover the remainder of Thor.

Finally he lifted Thor out of the hole and onto level ground. Kneeling once more, he took a small drink-scoop from his belt and placed it before Thor. Then he pulled out his knife and folded his single leg under him; bending over, he cut a gash in his wrist and let the blood flow into the scoop until it was nearly full.

Rising to his knee he said, "Oh, Thor, please take this humble offering to show that I am forgiven." Almost prostrate now, he picked up the scoop and placed it on Thor's lap beneath his arms.

Immediately there was a soft rumble and humming. Fearfully old Morge watched Thor's arms come down, lift up the scoop and carry it inside his huge mouth. There was a sucking noise and the scoop was returned empty to his lap.

Filled with joy, Morge spent an-

other endless time thanking Thor. Then all of a sudden an idea seized him. What if he carried Thor back to the tribe and presented him to the priest, Thougor, for all to worship and give sacrifices to? Would not he, the despised, the looked down upon, be the greatest of heroes? All that was known of Thor were the legends, but at last they would have the actual god!

Painfully, with many grunts and groans, he got Thor under one arm and staggered off towards the village, his crutch kicking up little puffs of dust.

• **B**UILDER WAS HAVING trouble with Thougor.

He almost wished now that he'd continued his search a little longer for a segment of humanity. He might have found a group less primitive who would have appreciated and understood his help much better. But this was the best he'd found; as it was, he'd wandered over the continent nearly a lifetime before even finding these poor wretches. But they were at least human—something that couldn't be said for those *others* he'd come in contact with all through the past years.

And now, after having been with the tribe—the only human tribe—for over a year, he was being balked by this—priest! Which meant being balked at setting up Truth and Knowledge as the only true gods of humanity, being balked at getting the dam built before the spring rains, so that there would not be another summer drouth followed by a winter of famine such as they had just passed through. The dam was his first big project; without freedom from want, there would be little progress next winter.

Almost savagely he turned on Thougor. "But why must you have this religious festival *now*?"

"Because of the finding of the god Thor," came Thougor's cold answer.

"Why the offerings of blood?"

Can't they wait? The dam *must* be finished before the rains; but the loss of blood already has so weakened the workers that they can no longer work for a full day."

"Which is more important, worldly or spiritual things?" Thougor replied.

"But there maybe won't be anyone around to indulge in spiritual things if there's another drouth this year!"

"Thor will see to it that there is not another drouth."

"Yes, I know, but wouldn't it be wiser to be on the safe side? Suppose somebody does something to displease Thor?"

"Nobody will displease Thor! It is my duty to see to that! I tell them what to think, so that they won't displease Thor."

A crafty devil you are, Builder thought. Manipulating this image of Thor you talk about, so that it will take the blood offerings of the people and even you and that half-baked discipline of yours, Morge. I must look at your god Thor one of these days—

He suddenly felt very weary and sat down on the floor; looking up at Thougor, he said, "But that is not part of being civilized, to tell the people *what* to think. You must *make* them think without telling them what to think. And with the dam, next winter there will be freedom from want for the first time. The tribe will have a chance to think and be on the road to civilization."

"The tribe has already found civilization in finding Thor. By worshipping Him as a group they have already ceased their bickering and quarreling. Does not that fit in with your definition of civilization, the one you gave my people when you first came to us? Since the coming of Thor we have begun to cooperate, have we not?"

"No, hardly at all. I said civilization is cooperation among men in adapting to environment—which includes man."

The two men stared at each other, and for awhile there was silence.

"Nevertheless," Thougor finally said, "Thor and blood offerings continue!"

•BUILDER WATCHED

Thougor turn and stalk out of the tiny hovel that housed his plans and his work, himself and his dreams. What could he do? He could only appeal to the tribe's reason; Thougor could appeal to their emotions which were far stronger. But unless emotion was controlled, used wisely, there could never be any reason.

Builder realized, with a sinking heart, that he was much too old for the job he'd undertaken. Too late in life had he discovered these people. Almost all his energy since youth had been sapped just looking for a segment of humanity. His mother and father had told him there might be failure, but still they had taught him everything they could in the short time before death had overtaken them. They had been the only humans living in that towering jungle of concrete and steel. How they had gotten there was never explained to him. It didn't matter, though.

Suddenly Builder shook himself. Here he was recollecting his youth instead of concentrating on the task at hand. He must *really* be getting old.

He was glad of Thougor's visit. At least he was now fully aware of the problem to be solved. In spite of the priest, he had to find a way of getting that dam finished and soon. Or maybe next year there wouldn't be any people, for game was getting scarcer each winter.



Very little work was done that day in spite of Builder's managing to round up his full crew. The blood offering each worker had given the night before had left them tired and listless. Only four of the fifty-four molds running across the river were filled with sand and gravel that morning and afternoon—there were

still nearly fifty to be filled. Builder was very depressed—

But he was even more depressed when, at the close of day, two workmen grew careless and slipped into the last mold being filled; their ear-splitting shrieks brought half the tribe up over the hill above the village and down to the dam sight.

After Builder explained what had happened, there were angry mutterings to the effect that Thor was displeased with the dam and therefore had taken lives. Nothing Builder could say would dissuade them from this notion, so well had Thougor indoctrinated them with religious fear of anything used to control nature. Builder hadn't realized until that moment just how much the people were against the dam.

Then he saw Thougor, tall and ominous in his cloak of black skins, come striding through the crowd.

For a moment he stood facing them with his hands on his hips. There seemed to be a silent understanding between them. Slowly the crowd turned and disappeared over the hill.

Then Thougor strode over to Builder and said simply, "There will be no more dam." Turning he followed the rest of the tribe back to the village.

Builder was thunderstruck. He knew there was no use arguing or trying to reason with either Thougor or the tribe. It was too late for that; only some drastic measure would complete the dam now.

He walked tiredly over the black hill and down to his shack, wondering how he could compete with an idol. He realized now, it had been foolish of him to have overlooked the possible effect Thor might have upon the tribe. When it had been found three months ago, he never dreamed they would spend all their leisure in rituals.

The god was his problem; therefore he must get it out of the way, himself, without expecting help from anyone. Each evening the clouds on

the northern horizon were darkening and drawing closer.

●IT WAS NIGHT WHEN Builder finally stumbled into his quarters. After lighting a pine torch he sat down by his workbench and buried his head in his hands. He was too tired and upset to eat, which was just as well—

Outside of deliberately killing Thougor, there was only one thing he could do—that was to kidnap Thor. With this realization, in spite of the risk involved, came some peace of mind. He hadn't the vaguest idea just how he was to go about it, especially since his strength was failing him, but do it he would. First, though, he would have to wait until sometime before dawn when everybody—even Thougor—was sure to be asleep.

The hours dragged heavily between then and his chosen time. Many were the times when he longed for something to read, although he supposed that by this time he'd forgotten how. Like wisps of smoke, memories of his youth in the concrete jungle drifted through his mind. How long ago that all seemed now. Sometimes he wondered if any of it had been real. But here he was, as his parents had wished him to be, trying to help what was left of humanity back up the trail. To what, he wondered? To destruction again—this time, probably complete and final?

He shook his old head and ran a trembling hand through his white shaggy hair. He'd gotten this far; somehow he would get the rest of the way.

Builder got up and crossed over to his sleeping pile. After tying several skins together, he folded them under his arm and walked out into the pre-dawn night. His bones felt the crackling cold of early spring as they had never felt it before. Slowly he made his way around the village to where Thor was housed under a huge slanting roof of bark and scraped skins. He'd never seen Thor, and now

wished he'd paid at least one visit to the god.

Like a shadow he glided carefully through the blackness in back of the temple until he was just inside the rear opening. He could see clear across the chamber, out into the pale twinkling stars. Then he detected a dark mass in the center of the temple silhouetted against the stars; that must be Thor.

Swiftly Builder advanced towards it until his foot struck something soft, causing him to stumble and fall. As he did so, he heard a grunt sounding like someone being kicked in the stomach—

Then something was on top of him, pounding his head and shoulders with a heavy stick of some kind. Old Builder knew he didn't have the strength to wrestle; he managed to get his pile of skins unfolded and, with his last ounce of strength, throw them over the head of his attacker. Somehow he managed to wiggle out from underneath and climb to his feet. His assailant began to scream for help, but the heavy skins muffled his shouts.

Quickly Builder looked around for something to hit him with. The only thing his eye spotted was the idol. He hobbled over and, using both arms, dragged it off its dias. Then, with the remainder of his strength, dropped it squarely on top of whomever was under the skins. There was a muted clunk followed by silence.

Fearfully Builder stood there for a moment catching his breath and listening for anyone coming. All was quiet except the pounding of his heart.

As fast as he could make his arms and hands work he rolled up the body in the skins and painfully hoisted it over one shoulder. With his other hand he reached down and picked Thor up by one of its arms, then, staggering under the load, he started back the way he had come.

Except for a greyish streak in the east, it was still dark. He stumbled

and fell several times before reaching his dwelling, but he was confident that he had left no tracks. Every night, even this late in the winter, the ground froze solid.

• **BACK** INSIDE HIS SHED, still in the dark, Builder unrolled his burden and listened for any heartbeat. There was none. As he rolled the body up again, something clattered to the floor. It was a crutch. Quickly he felt for his victims' legs; one was missing. Of all the people he had to kill—Morge! Thougor's right hand man.

He realized he had to get rid of the body before daylight and fast! Already more grey was lining the eastern horizon.

He didn't know whether he had the strength to do it or not, but he had to get Morge up to the dam and into one of the unfilled molds. For the time being he would have to hide Thor someplace inside here. He couldn't carry both of them up to the dam.

He rolled the idol up in another set of skins and placed it under the head of his sleeping pile. Then, picking up his other bundle once more, he started for the dam.



The sun was just peeking over the horizon when Builder finally stumbled back into his dwelling and into bed.

All that day, he lay there, body on fire with fever, and heart pounding like a drum. He was almost certain he would soon die. "It was just as well," a little corner of his consciousness said. At least he would be missing all the frenzied excitement of Thor's disappearance along with Morge.

But it looked as though he had failed after all. In spite of removing the god, now he was dying—and the dam still unfinished.

The day dragged on and on and he didn't die.

After waking up in late afternoon he felt better. He ate a handful of

nuts and figs washed down with a little herb tea. Then as night crept over the sky, he tottered down to the village.

Whatever had taken place during the day was done, and little groups of people stood around fires resting and talking—as though it were the old days before the coming of Thor, thought Builder. That was good.

Builder moved in closer to one of the fires to warm himself against the early spring night. Someone recognized him—it was one of his workers—and he was suddenly made welcome, once again being given the place of honor nearest the fire, as in the old days when he'd first discovered the humans.

Builder was dumbfounded at the sudden cordiality. In recent days, Thoughor had done such a good job of discrediting, he never dreamed of regaining his old standing.

Then he was told what had happened during the day while he lay almost dying:

When the god and Morge were dis-

covered missing, Thoughor had called the village together, explaining that Thor had left them, taking Morge as a sacrifice because he was dissatisfied with the tribe's paltry blood offerings and worship. Therefore a great death sacrifice of young men and women must be undertaken to pacify Thor and cause his return.

But the people questioned Thoughor's order; they seemed to feel it was the priest who had been at fault, not themselves. After all, he was the closest to Thor, was he not? Therefore it was Thoughor, not the village, that Thor had become angered at. And after holding quick council, they had driven Thoughor out into the wilderness, telling him he was not to return unless Thor was with him.

Old Builder almost cried when he heard this joyful news. The dam would be completed after all, he was almost certain. He decided to say nothing more about religion, Thor or Thoughor. Maybe soon they would forget the whole thing. Now he could go back to

[Turn To Page 98]



"What have you got to live for? There hasn't been a single new biological discovery for nearly a century. Or any other kind of discovery, come to that. Science is dying on its feet, and art is flat on its back, dead."

Yes, civilization was now secure—and perfectly stagnant. So they instituted an

EXPERIMENT IN GENIUS

this satirical novel by

William F. Temple

*leads off the
November issue
of*

FUTURE
combined with
SCIENCE FICTION STORIES



This department is for you readers, where you can discuss science and science fictional subjects in general, and your opinions of *Futures* in particular. We will pay two dollars for each letter published, regardless of length.

Dear RWL:

A number of things have kept me from reading science-fiction magazines for a number of months, and am just able to browse a bit again. Picking up the May '51 *Future*, I note that your letter column has improved quite a lot, being quite readable due to the absence of adolescent yakityak. As some questions are asked, let's try to answer them. More than 50 years of study in many corners of this world have given us at least some answers.

Science fiction can be defined as stories of "could be" based on a group of scientific data. Whether they are data or facts is another moot question.

Which brings us to the second question: What is matter? According to the best knowledge, matter is composed of bubbles of force in a very dense matrix. The wave action being nothing but induced vibrations in other groups of bubbles of force called matter. The collapse of the matrix upon the destruction of the matter bubbles in an atomic explosion gives that devastating release of energy.

Dianetics is another small step forward, in the struggle to understand what makes homo sap tick thataway. As far as it goes, it has validity. But it does not go very far, yet. Really to understand Man, other ave-

nues of approach than those as yet open to our science have to be opened. Dianetics is right in its view of how "engrams" as such are built up. But limiting them to physical pain, or similar physical nasty experience is trying to do too much in too narrow a field. Already Edison knew, and had found, that the next real step forward in knowledge would come in the knowledge of *Man* and his extensions into the super-physical. Much argufying is going on about what is "scientific" and what is not. "Science says" meets us very often, but what is "science" and since when has "science" ever been of one opinion about anything? Scientists certainly are not. You are certainly right in stating that it's very hard to be 100% wrong everywhere, humanity being in its present state.

But now let's throw a few curves of our own. All the science fiction writers seem to assume that our present way of living, and our humanity, will go on and on at the present tack until we have "conquered" the whole galaxy. Now anyone who has read widely in many languages has come across plentiful evidence that

(a) human development has gone on in direction after direction, each ending up some blind alley, ending in more or less total catastrophe. Killing off a high civi-

lization by its own technology. Making the signs about our future via atomic war all the more ominous.

(b) Many old races and cultures have retained sagas describing super-human visitors coming in fiery ships from the skies and giving aid to the catastrophes, and/or teaching arts and crafts. The "flying saucer" story contains quite a number of appearances of craft which are not flying saucers, but which would fit space-craft.

(c) What about the "vortices" or "Mystery Spots" which dot the Earth? Places where gravity and light cut strange capers. Why are these spots lined up on straight lines with an approximate 50 mile spacing? And why do "Flying Discs" etc., seem to follow these lines?

(d) Why has nobody yet had the idea to chart a number of observed courses of such craft, and so find the intersections of such courses—which might lead to some spots which have been recorded as "strange" in the past. But would it be possible to investigate such locations?

(e) Why the phenomenal gall to assume that our present-day average and mediocre homo sap is the crown of creation? When he cannot even run his own affairs without making an everlasting mess of it?

Incidentally, I have a large number of which I would like to get rid of—some of them going back to the large-size era.

*Frederick G. Hehr
1447-D Stanford
Santa Monica, California*

(I can't say I agree with your statements to the effect that all science-fiction writers seem to cling to the "onward and upward" school in their efforts. You see quite a few stories which make different assumptions, such as "The Troubadour", in this issue.)

Dear Mr. Lowndes:

It was most gratifying to know that I had won the January "favorite letter" contest. Many *Future* readers have written to me, which I also appreciate. As yet, I haven't answered all the letters, and though I'm too busy to carry on a steady correspondence with most, I will promise at least to acknowledge every letter received.

Memo to Joe Gibson: In the May issue of *Future*, you write, "Personally, I care nothing for any award-system to get good

[Turn Page]

Reader's Preference Coupon

When you have read this issue of *FUTURE*, we would like to know how you rate the stories. Just put a numeral opposite each title; they are listed in order of appearance, but you number them in order of your preference.

1. GENESIS
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letters in a readers' column. Nor for any sort of award." Yet, I'll bet you didn't mind receiving a two-dollar check for your letter—or, since you care nothing for awards, I presume you've sent it back. Payment for letters helps to insure good, constructive, well-written, serious efforts on the part of readers. Also, since the editor is paying for them, it's really a contest, and as such offers competition, a challenge; and when a letter is used, it gives one, or should give one, a feeling of accomplishment.

With all this Dianetics fanfare, I wonder how many *Future* readers are familiar with the Conditioned Reflex, founded by the Russian physiologist Ivan P. Pavlov, whose discoveries won him the Nobel Prize. The foremost exponent of this today is Andrew Salter, author of *Conditioned Reflex Therapy* and also *What is Hypnosis?* Salter is a New York psychologist actively engaged in the rehabilitation of maladjusted individuals through conditioned reflex therapy. It's his contention that it is not so important what went on in one's past life as it is to adjust him to his present environment—that *knowing* what makes one neurotic doesn't

necessarily relieve the malady.

Salter is in full accord with Pavlov when he writes: "...all the highest nervous activity, as it manifests itself in the conditioned reflex, consists of a continual change of these three fundamental processes—*excitation, inhibition, and disinhibition.*" For those who aren't familiar with this therapy, here's one of the oldest examples: Pavlov, in his laboratory, used to ring a bell every time he fed his dog meat. Soon, the mere ringing of the bell would make the dog's mouth salivate, and make anticipatory chewing movements. Henceforward, every time the dog heard a bell, he thought of food.

Human beings can learn to readjust themselves to situations by conditioning. This process isn't long, strenuous, or too expensive. And, above all, it produces *results*. It's all a matter of learning and unlearning new thought processes and associations.

Leo Louis Martello
653 Washington Street
New York 14, N. Y.

(A number of readers still seem to wonder whether the \$2.00 payment for letters

Did you think the cover was better than last issue's?

as good as last issue's? not as good?

Did you think the artwork was better than last issue's?

as good as last issue's? not as good?

Did you find the stories better than last issue's?

as good as last issue's? not as good?

Were there any stories in this issue you did not like?

Which letter in "Down to Earth" did you find most interesting? (Name of the letter-writer.)

Shall we continue to offer payment for letters?

Did you like the article? Want more?

Would you prefer to see the letter department cut out altogether?

.....

won't result in "battered" opinions—just nice letters oozing praise for everything in the book. Well, so far I haven't noticed any alarming absence of complaints and knocks—and those who have raised the question haven't pulled their own punches, either.

As I've said before, the payment policy is merely to express our appreciation for interesting letters. We receive many more than can be used, but I try to pick out the most representative; one letter published will often express the stated opinions of many others.

Would we receive *more* letters, or *more interesting* letters, if we did not pay for those we use? Frankly, I don't know. Would you like me to try? This is something where I can follow your desires, so please use the voting coupon in this issue if you want to see a change. The first time, opinion was decidedly in favor of the payment policy, but, since then, you've had a chance to see more letters. I cannot make this department much larger, in any event, unless you definitely feel that you'd rather see more letters, even if we have to cut down the story content somewhat.)

Dear Sir:

I wrote you some time ago, giving my stand on the subject of Dianetics, and am pleased to announce that I'm now engaged in a project whereby I hope to provide verification or refutation of Hubbard's thesis. I am letting myself be used as a "guinea-pig" to see if there is anything to this thing called Dianetics. The local Dianetics organization has been good enough to pay my way through processing, and the incident psychometry. My case is a good one, due to the findings by the army doctors, and may be the one to give validity to Hubbard's thesis. I had no idea that I would be able to set myself up as a subject for experimental dianetics, and thought that I would have to do it the hard way, by getting someone to work with me. I've only had a few hours of processing, but the results have been startling, to say the least, having gotten to incidences I never knew had happened.

I think that the controversy as to the validity of Dianetics is very far from settled, and it will rage for many years to come, there being some "die-hards" who will not dirty their hands and get to work, and *do* something with it. Also, there is probably a lot of this "vested interest" thing to provide opposition. I've seen some of it operating in several places, and the attitude frightens me; it makes

me wonder, sometimes, how much of the knowledge of the past has been suppressed because of it.

Let's keep the pot boiling, and maybe someone will come up with a good suggestion one of these days. I like Mr. Blish's attitude on the subject, so let him sound off some more.

Clarence R. McFarland, Jr.,
3612 15th Avenue West,
Seattle 99, Washington,

(With your stand on Dianetics—or any other unestablished theory—I can see no fault. You are going into it with some awareness that it might not work, and that it *might* prove dangerous to you. This is a far cry from the attitude that we have been opposing—namely, that it *has* been proven beyond doubt, etc., when, in actuality nothing of the kind has happened, so far as any available evidence is concerned. May 10, 1951.

The controversy has raged for nearly a year, now, and has long degenerated into the "it is!", "it is not!", "yes it is, too!" stage. Since *Future* is a fiction magazine, we are inclined to agree with the many readers who have written in to state that they wished we'd drop the subject. Thus, the letters in this issue will be the last in the great controversy—until and unless there is something more definite in dianetics to talk about, something other than reiterations of the original—still unestablished—propositions in Hubbard's book, and reminders that evidence still remains lacking.)

Dear Mr. Lowndes:

With each issue, *Future* seems to be graduating qualitatively in story format, but paper, inking, and printing quality still seem to be in the doldrums. However, you still do average the best interior illustrations in the field, even with occasional faded reproduction as a slight drawback.

This dianetics controversy, which seems to be popping up everywhere, is most of the time quite disparaging to the analytical mind. I do not intend to spend the rest of this letter in discussing dianetics, and I won't. All that is left for me to say, after a number of investigations, et al, into this alleged "science of the mind" is that either something authentic had best be produced at once, or very soon, or else I am of the opinion that it will dry up and disappear as fast as it came into being. In short, I, and I think countless others, are neither *pro* nor *con* dianetics.

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As far as the unopinionated and liberal mind goes, no demonstratable items have appeared as yet to designate really what's cooking. No analytical person has as yet been able to take sides, except for those who have personal motives involved in this organization. No evidence either to damn or laud has been produced—this is worse than if praiseworthy or damning conclusions were drawn up. 'Nuff said.

I like your book reviews immeasurably. They are about the most interesting and intelligent that I have yet come across; of the books which I'd already read before seeing your review, I agree one hundred percent with your appraisal of each one, so far. Your review, in particular, of "1984" was most excellent. However, one saddening thing is that it has not had the popularity worthy of it among science fiction and fantasy readers. At times, one can almost see and feel "1984" creeping up on us during these trying times. The Washington "Witch Hunts", investigations, wire-tappings, and such defilers of the American Constitution are sort of 1984ish. Makes one's flesh creep sometimes. It's bad enough that a lot of our heritages are being broken, but what of the bystanders that have nothing connected with these American "putsch" pogroms of ours? Must so many of them be dragged into the defamatory mire and muck produced by others.

While some so-called do-gooders are trying to clean up the houses of others, our national house is left unclean, with lovely twenty-billion dollar a year gangster rings running the works. But, most appalling of all, a departure from all things spiritual, fraternal, and non-material into things base and material is the most deplorable condition yet perpetrated in the social spheres of this nation, and some of the others. And what of the future if the trends of today keep remaining the gospel of tomorrow?

Calvin Theo. Beck,
Founder AMERICAN SCIENCE-FANTASY SOCIETY,
7312 Blvd. East,
North Bergen, New Jersey.

(Some wag, with more sense than most, once noted that even if the "Meek" did inherit the Earth, the "un-Meek" would soon get it back. Which is just another way of noting that "freedom", one's "national heritage", etc., is not something that can be "won" once and for all, any

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more than a fence post can be painted white once and for all.

We were taught, and those of us now older teach, much about the contrast between the so-called "American Way" and that of other cultures and civilizations. We stress the issue of "civil liberties", often with a bit of inward embarrassment because we are aware of many violations of these "rights" at home.

Now, and this is one of many crucial questions, what about the, often substantial, differences between what the "law says" and what we actually see about us?

First of all, one has to accept the fact that the difference exists; one has to recognize that it is there, that it exists as a problem to be faced and dealt with, as best we can. To deny it, to try to pretend that it really isn't there, to react to the statement of the problem as if the critic were a traitor—this sort of behaviour is more dangerous than the "violations" themselves. Because this leads to helplessness in the face of challenges to our "liberty", and encourages violations of it.

Secondly, one has to realize that human beings are capable of drawing up nearly "perfect" documents, of setting up ideals, etc., which are *most likely* to be beyond their capacities of achievement at any given instant. "Civil liberties" are written into laws; they are directives, statements of intent; they cannot, by any magic of their own, guarantee their fulfillment. But does this constitute grounds for resigning? Of course not; one has to accept this fact, but nonetheless consider these "ideals" as a goal, to do what one can *toward* their realization.

Thirdly, one has to realize that "freedom" has been precarious throughout all periods in our "American experiment"; look back at any period since the founding of the nation, and you will find incidents and complaints which might have been in yesterday's papers. The reason why "civil liberty" *still exists* as something to hold up for safeguarding is that, throughout our history, *someone* was there to complain, lament, get het up about, and fight against "violations" of it. The *hopeless* time will be that time when *no-one* raises his voice or grouches about it, or tries to do anything about it.

Fourthly, one has to maintain a sense of proportion. There are a number of misguided souls who go around moaning things like: "Well, what's the difference between the Moscow Trials and the Washington and Hollywood "Witch Hunts"? etc. How many alleged or actual "Reds" have been shot? Were the families of the accused shot, or thrown into concentration camps? Have those who questioned the proceedings mysteriously disappeared? Have there been waves of pat "confessions" from the accused? What kind of trials did the indicted Communist leaders have? Were they allowed to speak in their defense? Did the public hear their defenses? And so on and so on and so on.

In short does accusation amount to final conviction?

DOWN TO EARTH

Well, the last I heard, it doesn't.

To sum up there's a substantial difference between imperfect and imperfectly administered "civil liberty" and the total absence of it.

Let us consider, for example, the question of race hatreds. In the USA it is the citizen's *right* to dislike or to hate members of so-called racial groups, as irrational and "un-American" as this may be. In Nazi Germany it was the citizen's *duty* to hate members of so-called racial groups, and the person who did not hate so-called "inferiors" was a *traitor*. In Russia, your enemies are picked for you by the State; you are told whom you *must* hate; in countries where "civil liberties" exist, you are *not required* to hate anybody—and you can be "agin' the government" without automatically becoming an outlaw.

We are learning to be wary of slogans, but there are some which can be considered as valid, and one of these is the current "Freedom is Everybody's Job". One of the "facts of life", as documented by history—human history in all times—is that no "people" have enjoyed any more "liberty" than they were willing to fight for—constantly. It's much simpler to decide, "well, the constitution guarantees so-and-so and sit back, expecting to have so-and-so—", perhaps occasionally lamenting when you see, hear of, or experience, "violations" of your "rights". Yes, it's easy—and an easy way to lose them all!

If that happens, we will have to learn another vital difference between our form of society and that of Russia, and other totalitarian setups. Here, when a citizen's "rights" are invaded, either by over-zealous officials, or other citizens, he can fight for "justice" *within the framework of the laws of this society*; there, the only recourse is to take to arms—or try to get out of the country.

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FROM THE BOOKSHELF

(Continued From Page 55)

ber of successes. "Characterization", as such, had improved, although the stereotyped "hero", "heroine", and "villain", were still in evidence.

What Heinlein did was to concentrate on the people in his stories, in addition to a fund of "ideas". He tried to make his characters talk and behave generally like the various kinds of people readers know, or know of. There were no omniscient and utterly noble "heroes"; no "pure" and simple heroines; no cardboard "evil" villains. The "heroes" and "heroines" while sympathetically presented, were not faultless, and the motivations of the opposition were understandable; you might not particularly "like" the "villains", but their motives were understandable enough, and they were presented sympathetically in that, if they could be "straightened out" you would find them likeable people. They weren't "inhuman" monsters, etc.

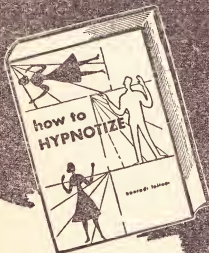
And, with this, Heinlein abandoned much of the naive of science-fictional assumptions about "great inventions", etc. They affected society, and they made changes; but they didn't magically transform human behaviour patterns into shining righteousness and utopia.

WHAT HEINLEIN did, then, was to introduce a number of the "slick" elements into science-fiction "pulp" writing. However, this treatment has its faults, and you will find a number of them in some of the Heinlein stories—although the worst stereotypes (for the "slick" treatment produces stereotypes, too) have been perpetuated by others who swung into the new orbit. Out of this comes such stereotypes as the "engineer", the bright young Annapolis or West Point army officer, the super-salesman, and others. It isn't that you won't find living persons who talk and behave very much like these superficial and bright young men and women; you will, and in depressing quantity, too. It is, rather, than there are many more kinds of people who make up our civilization—and our civilization does not consist solely of the "American" attitudes—than this handful of "elite"; and all problems cannot be solved from their frequently shallow and semantically un-integrated orientations. There was a quality in the older science fiction, with all its limitations, that made it endurable despite them—a quality of "wonder"; and this quality is lost in the future as seen through the eyes of bright young men, and their projections of their own sleek insides upon the world of events.

But, make no mistake: most of the Heinlein stories were good ones, and even in the lesser works, the gentleman holds your interest. And I can heartily recommend Shasta volume, "The Man Who Sold The Moon"—a book well worth the \$3.00 they ask for it. For those to whom the price

[Turn To Page 96]

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might be a difficulty at the moment, the Signet edition, selling at 25c, has most of the best stories in the collection.

I would say, also, that the long novelet—or short novel, if you prefer—"The Man Who Sold The Moon" is something in the nature of a science-fiction "classic". It isn't pleasant, and you may not like Harriman, but the presentation is magnificently realistic, and Harriman emerges as a thoroughly understandable human being. His role is certainly historically justified, if nothing else. He isn't just a "financier", just a sharp "super-salesman", just any one quality abstracted from the many qualities that make up any given human being and presented as the whole person. He is a "dreamer", but one who recognizes the "way of this world" and has adapted his behaviour and "ideals" to conform with events taking place outside his own skin. I think it is very possible, that Heinlein has described just about the way the moon is most likely to be reached; he treads on a great many illusions, but, whether he is right in each specific case as relating to the particular problem, the illusions are better off dead and forgotten.

The final story, "Requiem"—to be found in both editions mentioned above—makes a fitting sequel to the main story, and can be considered as something of an epilogue.

To repeat: "The Man Who Sold The Moon" is, for me, one of the best buys of the season. RWL

TODAY AND TOMORROW

(Continued From Page 49)

names for this, that, and the other, but systems of names and relationships. You check on the accuracy of systemic statements by logical consistency—in other words, when we speak of "the new issue of *Future*" we aren't talking about a magazine one day, and a set of underwear the next.

Third, we have the *directive* function of language. Directive statements try to influence and/or control present and/or future behaviour. "No smoking", for example, is a statement which tries to control your behaviour in a particular area. (In some senses, directive statements do imply information: the sign "No Smoking" not only tries to persuade you not to smoke here, but also predicts consequences which may follow if you light up a cigarette in this place, anyway.)

Fourth, we have the *expressive* and *evaluative* function of language, wherein we express our feelings and attitudes. Statements such as, "That was a lousy cover on your latest issue," "This was your finest issue to date", are not primarily informative remarks. They indicate the speaker's reactions, and may at times be representative of more or less general agreement on the part of numbers of people.

I AM INDEBTED to S. I. Hayakawa for the above, and will now quote a few more complex examples from his book, "Views on Listening", which appears in the Autumn, 1949 issue of ETC., A Review of General Semantics.

"*Magic Baking Powder contains no alum.*" This statement is on the surface informative. It has valuatative connotations, however, since it is implied that inferior baking powders contain alum. It had also a directive function, suggesting that you buy this kind.

"*Bill is a communist.*" Although this statement is systemic in form, it can, depending on context, be used informatively, directive, or valuatatively. (Or, can serve all four functions simultaneously. RWL)

"*Best motor oil.*" Ordinarily valuatative, but in technical discourse where such criteria as the Society of Automotive Engineers' standards are previously agreed upon this statement can be informative.

"If you spell it backwards, it spells 'Nature's'." This is, I suppose, a systemic statement, but it is certainly used for its valuatative and directive implications."

Thus, we see, we have at least four different meanings possible for the expression "meaningful talk", and each of these forms has its own standards of meaningfulness. We find, too, that "logic" can be a systemic discipline, in that it can tell us what statements may "follow" from other statements—although what "logic" does not do is to tell about the accuracy of informative statements. Much nonsense, and much deadly and disastrous nonsense, can and has resulted when a conclusion, based upon rigorous observation of the "rules of logic" is presented for action, where the original premises were inaccurate or meaningless.

"Talking meaningfully" then requires that (a) informative statements amount to verifiable reports of events, objects, etc., outside of the words themselves; (b) systemic statements must bear a recognizable conformity to each other—that is, what we say at one moment should bear a recognizable relationship that what we say at another moment; (c) directive statements must stand the test of predictions—that is, when we say "do this" or "don't do that", we imply certain types of consequences if the direction is not followed; (d) valuatative statements must be recognized as such, and not confused with the other three kinds; they become important, however, when they correspond, subsequently, with informative, systemic, and directive statements.

I agree then, with Mr. Palmer that "talking it over" is important—particularly important in these times—providing the talk consists of meaningful communication. What I have noted above, represents only a small part of the necessities of "meaningful talk"—and we haven't even considered, here, the limitations of "talk", a subject of still greater importance.

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SI-P-361

REGENERATION

(Continued From Page 85)

teaching the youngsters and some of the brighter oldsters the methods of writing in symbols instead of drawing pictures.

HOURS AND DAYS TURNED into weeks and months as Builder taught his people what feeble knowledge he possessed in arithmetic, simple engineering—such as the dam—and most of all, instilling in them the will to want to learn and investigate and question anything they came in contact with—even the very thing he was asking them to do.

As the weeks passed on and the dam was completed, he gradually gathered around him an ardent little group of seeker after that most elusive of all things—“Truth”.

But Builder knew that his days were numbered now, and his work completed; there was still one thing he had to do, and that was permanently to do away with Thor by dropping the idol to the bottom of the dam; he still hadn't examined the god hidden under his sleeping pile.

One evening after returning from a solitary walk above the dam, he entered his shack and lit a torch, then almost dropped it from shock!

His dwelling was a wreck. The place had been ransacked from top to bottom. His sleeping pile lay in the middle of the floor—the idol was gone!

He turned and fled from the room, but before he could take a dozen steps towards the village, several shadows glided out from behind trees and rocks in the moonlight, resolving themselves into men.

Before he could cry out or struggle, strong arms pinned his arms to his body and someone clapped a dirty hand over his mouth. He was forced back into his hovel and the door slammed shut. Standing in front of him was a very bedraggled figure whom he recognized as Thougor. He also recognized his three other captors; all were elderly reactionaries of the

tribe who had disapproved of him from the beginning. In spite of his predicament Builder felt a warm glow of happiness course through him. If these were the only cronies Thougor could round up, that meant the rest of the villagers were sympathetic with his cause. He suddenly became aware of Thougor's grating voice:

“It took me a little time to piece things together, but once I did, it didn't take me long to come back and find the god where I might have at first suspected it would be—right here! For your sacrilege you will pay with every last drop of blood you have in your scrawny old body—and now!” Whereupon Thougor disappeared out of the hovel.

Somehow Builder had known they were going to kill him before arousing the rest of the tribe to the fact that Thor was back. Thougor was taking no chances of his standing in the way of him or Thor ever again. But Builder didn't care; he had sown his few seeds of knowledge and wisdom well. Although Thougor didn't know it, this time he wouldn't have complete homage from all the tribe. There would now be doubts and questionings and tests for both Thor and Thougor in the ways of truth and righteousness.

Then Thougor returned to the shack with what, Builder thought, must be Thor. The hand over his mouth had twisted his head back so that he only got a glimpse, but he didn't miss the long knife Thougor pulled from beneath his tattered skins, nor the large sacrificial bowl one of the others held below his neck. Then his head was tilted forward and sidewise, and he got his first full look at the god Thor. At the sight, his whole body shook with smothered laughter. Below the two arms and etched thunderbolt were large block letters standing out in bold relief:

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